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The health-related concerns of older prisoners: implications for policy

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ABSTRACT

This paper examines the sociodemographic characteristics, health condition, and problems in the activities of daily living of two groups of older Texas state prisoners. The research group, assigned to a geriatric facility, were primarily Anglos who had committed violent crime. Few admitted to having a drinking problem but most admitted to a daily smoking habit. Most rated their current health condition as fair or poor; many used special equipment to aid their movement and breathing. Their self-rated health condition was worse than that of a comparison group of older inmates drawn from the general population of the prison. Inmates and health-care providers agreed that separate facilities for older prisoners are desirable. The paper concludes with a discussion of the implications for prison management and future policy.

KEY WORDS – prisons, elderly prisoners, sentencing policy, health policy.

Introduction

Social changes in the wider society eventually filter through prison walls (Sykes 1958). One such phenomenon is the ageing of the American population (Rice and Feldman 1983). Like the non-institutionalised population, the prisoner population is 'graying' and will continue to grow older for several reasons (Teller and Howell 1981). Many jurisdictions have instituted 'three strikes' laws and mandatory minimum sentences, restricted good time, and/or have eliminated parole. In addition, data indicate older persons are committing an increased number of serious crimes. These factors will result in many offenders growing old in prison (Vito and Wilson 1985).

The Federal Bureau of Investigation's *Uniform Crime Report* (or UCR) data indicate that while total national arrests for the age group 50 and

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above decreased between 1971 and 1994 (despite an increase in the number of older persons in the general population), arrests for serious crimes increased among this age group. Over that period there was a 32 per cent decrease in total arrests for persons 50 and above, yet violent crime arrests (defined in the UCR as 'murder, forcible rape, robbery and aggravated assault') for this group rose by 105 per cent. Property crime arrests (defined as 'burglary, larceny, and auto theft', with arson added in 1981) rose by 85 per cent, with property crimes peaking in 1983.

While an increase in arrests does not automatically translate into more prisoners, those who commit serious offences are more likely to receive a prison term (Walker 1994). Paralleling the increase in arrests for violent crimes by older people has been a rise in the number of prisoners over the age of 50 within the US correctional population (Aday 1994). Punitive sentencing policies have led to an increase in the number of inmates serving natural life sentences, life sentences or sentences of 20 years or more. In 1986, these three groups comprised 17 per cent of the total prison population; by 1995 this had increased to 25 per cent. One national level estimate that was developed prior to many of the 'three strikes' repeat offender sentencing mandates, projected that by the year 2000, there will be 125,000 inmates in the US over the age of 50, 50,000 of whom will be over the age of 65 (Turner and Champion 1989).

These trends are noteworthy for prison managers who will need to accommodate this growing population (Rubenstein 1984). The process of ageing leads to a decrease in the immunological defences of humans, greater disability, more chronic conditions, and the need for specialised accommodation (Lilienfeld 1976). Researchers have found a strong relationship between ageing and the need for assistance with such routine activities as bathing/showering, dressing, eating, getting in and out of bed, and using a toilet (Kart and Dunkle 1989; Guralnik and Kaplan 1989; Verbrugge 1984, 1992).

The analysts of the 1990 *American's Changing Lives Survey* found substantial differences in health status based on socioeconomic status (as defined by income and education):

> Over the past half-century, lower socioeconomic groups have increasingly adopted (and higher SES groups have increasingly discarded) lifestyles and behaviors (cigarette smoking, high fat diets, heavy alcoholic drinking and sedentary lives) that have been identified over the past few decades as major risk factors for morbidity, disability and mortality. (House *et al.* 1990: 386)

Punitive sentencing and increasing numbers of older offenders mean that some young offenders will grow old in prison, and some older

offenders will die in prison (Enter 1995). Yet little research has been conducted on the health concerns, health needs, or health condition of older prisoners. More information on these matters is required to shed light on the older prisoner population as an important group of correctional health service recipients.

This paper examines the self-rated health conditions and self-perceptions of personal health of two groups of older Texas prisoners. The paper also presents interview data from health practitioners who interacted with and routinely cared for older prisoners. We conclude with a discussion of the policy implications of the data.

Methodology

Data collection began in December 1996 when the research team was allowed access to the Geriatric Facility at the Estelle Unit, a maximum-security unit in the Texas prison system. The Texas prison system is a vast correctional estate in which over 130,000 state felons are housed in 100 facilities located throughout the state. Employing over 30,000 security staff, it is one of the largest penal organisations in the world. This state also has the highest incarceration rate in America. The Estelle Unit, houses 2,200 male felons of all custody designations (minimum, medium, and close) and is located on a rural tract of forestland.

Security and medical staff refer to the inmates assigned to the single-level dormitory-style facility as 'the geriatrics' or the 'gerries'. This moniker is not clinically based but has emerged as a convenient mechanism for classification. The facility is a detached and separate unit within the greater prison compound. Inmates are assigned to this special unit by request or because of medical necessity. To be eligible for placement, the inmate has to be over the age of 50. Our initial goals were to establish rapport with the inmates and staff, and to observe the facility routine. We visited the facility weekly and sometimes at weekends.

In every conversation, we explained to the prisoners that we were interested in their perceptions of their health condition, their attitudes towards the unit health services, and what actions they took to maintain their health condition. We also indicated that we were utilising this background information and observations to construct an interview schedule for systematic data collection.

Our fieldwork led to the development of a lengthy interview guide

based on several national data collection instruments. From the *National Health Interview Survey* and the *Longitudinal Study on Aging*, for example, we selected closed and open-ended questions on smoking, activities of daily living, functional limitations, and health service utilisation. Because of the age, general health condition, and expanse of the data collection instrument, the researchers decided to read the questions to the subjects and then record their responses directly on the instrument. From our prior observations at the facility, we knew that a self-administered questionnaire was not feasible because, for example, of the inability of inmates to read, or their sight problems.

A preliminary interview schedule was pre-tested with five prisoners in March 1997. We then narrowed the instrument to 160 questions in seven sections:

- socio-demographic characteristics;
- criminal history;
- lifestyle and patterns of drug, alcohol and cigarette use;
- perceived health status, health condition, and attitudes towards a co-payment system;
- mental health status;
- institutional living issues;
- attitudes toward living in the general prisoner population.

Inmate interviews began in late March 1997 and were concluded two months later. At the beginning of the research, 45 inmates were assigned to the Geriatric Facility. We interviewed 23 of these inmates. The respondents consisted of a convenience or snowball sample. We made every attempt to interview inmates who had resided at the facility for at least six months. Of the 22 we did not interview, 10 refused to participate, seven were new arrivals, and the remaining five were transferred out of the unit as punishment for operating an extortion racket within the facility.

For comparative purposes, the researchers also interviewed, in May 1997, 46 prisoners over the age of 50 who were housed elsewhere in the Estelle Unit: the non-facility sample. These 46 inmates were selected from a total population of 60 prisoners over the age of 50 in the general prisoner population. Interviews with subjects in both samples lasted an average of 90 minutes.

We also conducted short interviews with seven nurses and one physician who worked closely with inmates housed in the facility. Our goal here was to elicit their views of the health issues and health-related problems of older inmates. As these people were involved in day-to-day care in the facility, we wanted to hear what they perceived to be future trends and issues in correctional health care for older prisoners.

Findings

Before we examine the health-related data from the two samples, it is important to summarise the background of the respondents.

Tables 1 and 2 show the key offence and demographic information of the two groups. The mean age of the facility sample at the time of the interview was 69 years. These inmates were also predominantly Anglo and single, widowed or unattached at the time of the interview. Nearly half had not graduated from high school. Fewer than half were employed full time at the time of their arrest. They had spent an average of 35 months in the facility.

Most of those in the facility (78 per cent) claimed to be free and/or under no form of legal supervision at the time of the arrest that led to their current incarceration. Nineteen were imprisoned for violent crimes, and ten of these respondents claimed that they had committed a murder or attempted murder. Several stated they had killed their spouses, one admitted that he had committed a capital murder, and another stated that he had attempted to commit a murder. Four admitted to sexual assaults. Few had committed drug, property, or other kinds of offences. They reported an average of nearly two prior Texas prison confinements. Seventeen of these men (70 per cent) admitted that their first time in prison was after the age of 40. In sum, the facility sample consists of men with prior experience and contacts with the criminal justice system. They are primarily violent offenders sentenced to prison later in life (nearly 50 years old when convicted for the first time) with an average sentence of 53 years in prison.

Our non-facility sample, older prisoners in the general population of the Estelle Unit, averaged 61 years old at the time of the interview and had served an average of 51 months at the Unit. Like the first group, these prisoners were primarily Anglo (65 per cent), unattached (72 per cent), and nearly half (46 per cent) had not graduated from high school. Most (83 per cent) were employed full time at the time of their arrest. Most (63 per cent) claimed that they were under no form of legal supervision at the time of their incarceration. Of this group, the mean age of first incarceration was 40 years; over half admitted their first incarceration occurred when they were over the age of 40. Unlike the facility group, fewer (59 per cent) were incarcerated for violent offences. More (20 per cent) had engaged in property offences. However, more were incarcerated for 'other' offences such as fraud. Their mean sentence was somewhat shorter, averaging 48 years. These prisoners reported an average of nearly three prior Texas prison confinements.

TABLE 1. *Age and sentences*

	Facility	Non-facility
Mean age at interview	69	61
Mean age first went to prison	48	40
Mean number of prior convictions	2.0	4.0*
Mean number of prior prison terms	1.7	2.8
Mean sentence length (yrs)	53	48
Mean number of months at Estelle Unit	35	51

* $p < 0.05$

TABLE 2. *Key characteristics*

	Facility (%)	Non-facility (%)
Race		
Black	22	22
White	61	65
Hispanic	17	13
Marital status		
Married	35	28
Less than High School education	48	46
Employed full-time at time of arrest	48	83
Legal status prior to arrival		
Free, no supervision	78	63
Offence of conviction		
Person	83	59
Property	4	20
Drug	8	9
Other	4	13
Total (= 100%)	23	46

Health habits

The vast majority of respondents in both groups claimed to have completely refrained from any kind of illegal drug usage. These self-report drug data must be interpreted with caution, however, given the incarcerated status of the respondents and the incriminating nature of the disclosure. Several were incarcerated for drug offences, but in their words, were neither regular users nor drug dependent. Some of the interviewees claimed to have experimented with marijuana, and pills and one even stated that he had used and enjoyed heroin. Illegal drug use, however, was minimal with these men and this fact may well be a reflection of their age.

TABLE 3. *Tobacco and alcohol use*

	Facility (%)	Non-facility (%)
Ever smoked more than five packs a day	52	57
Ever smoked more than one pack per day	61	67
Admitted a drinking problem	22	26
Has health problems due to alcohol	0	11
Is alcohol dependent	4	13
Was high or drunk at time of offence	17	22
Even had treatment to quit	13	35
Interested in treatment	4	13
Total (= 100%)	23	46

Table 3 shows respondents' alcohol and smoking patterns. The vast majority of both samples reported that they did not have an alcohol problem. Most denied alcohol dependency and claimed they were not inebriated at the time of their present offence. In line with these findings is the fact that only one of the facility sample (four per cent) showed any interest in any kind of substance abuse treatment programmes; only 13 per cent of the non-facility sample expressed similar interest. In terms of smoking, we found that the majority of both groups had been regular smokers (more than one pack per day); many had started smoking by the age of 14.

Perceptions of health

The survey instrument contained questions, which assessed the respondents' perception of their own health status both in the wider society and in the penitentiary (see Table 4). The majority of both groups reported excellent/good health while on the streets in the years before incarceration, but both groups now reported declining health. For example, whilst 35 per cent of the facility inmates reported that they had had fair or poor health before entering prison; 70 per cent described their current health as fair or poor. When queried specifically about their *current* health status, the geriatric facility inmates were significantly more likely to report fair to poor health status.

Analysis of the 1990 *National Health Interview Survey* for American males aged 50 and above reveals that 77 per cent rated their current health status as excellent to good. This compares with 61 per cent of the non-facility sample and 30 per cent of the facility sample.

Perhaps a critical factor in their worsening health was a failure to utilise preventive care while in the wider society. While all inmates are

TABLE 4. *Health assessment and use of health services*

	Facility	Non-facility
Mean number of visits to infirmary in previous year	24	20
Health status fair or poor	%	%
Before prison	35	22
Current	70	39*
Health worse now than five years ago	46	54
Health will be worse in next five years	39	62
Seen a physician for a physical or checkup		
Never as a child	70	63
Never as an adult	26	59
Uses special equipment for mobility	56	20*
Uses prescribed medication	91	50*
Total (= 100%)	23	46

* $p < 0.05$

required to submit to a health screening on admission and to annual follow-ups, a number of the respondents reported never having seen a physician during adulthood before incarceration. Indeed, the majority of non-facility older inmates admitted they had never seen a doctor for check ups either as children or as adults. This finding may well reflect a generational phenomenon. Many of our respondents can be regarded as 'children of the Great Depression' who lacked the assets to seek medical interdiction when young. This pattern may have stayed with them as adults. Interestingly, this pattern changed once they entered the prison: a wide range of conditions have since been diagnosed (see Table 5).

In terms of self-rated impairments, both prisoner groups reported various vision difficulties ranging, for example, from blindness in one or both eyes, to cataracts, glaucoma, and difficulty with close vision despite using eyeglasses. The overwhelming majority of respondents in both groups used corrective lenses.

Regarding medical conditions and treatments, more than half of the respondents in both groups claimed that arthritis and back trouble bothered them. It is noteworthy that over half of the facility inmates used special equipment such as wheelchairs, walkers, and canes. A greater number of non-facility inmates used hearing aids. Only small percentages of both groups still had all of their teeth.

Almost all those in the facility and half of the non-facility inmates reported daily use of prescribed medication. Nearly half of those in the

TABLE 5. *Self-rated impairments and health conditions*

	Facility (%)	Non-facility (%)
Blind in one or both eyes	26	13
Cataracts	22	15
Glaucoma	9	11
Trouble with close vision with glasses	35	44
Wears prescription eyeglasses	78	70
Uses magnifying glass for close work	22	26
Deaf in one or both ears	13	28
Uses a hearing aid	4	20
Has all teeth	13	24
Has arthritis	61	50
Has diabetes	13	13
Has hypertension	48	35
Has coronary heart disease	48	24
Has back trouble	61	63
Is on a special diet	30	17
Total (= 100%)	23	46

facility admitted to coronary heart disease and hypertension. Fewer numbers in both groups reported that they were diabetics, stayed in bed due to their health condition, and/or required special diets. Many reported that their health condition limited their physical activities and prevented them from engaging in light work/chores in their designated living area. Many expected that their health condition would worsen in the next five years.

Boredom

Of particular interest is the finding that a significant difference exists between the two groups in their reportage of boredom (Table 6). Facility inmates were more likely to report feelings of boredom. We asked these respondents to 'Describe your daily routine for me. What do you do on an average day?' In general, they ate, visited their friends or acquaintances, a few wrote letters, some read papers/magazines, many watched television, snacked, napped, and a small minority went outside for fresh air. Most complained about the lack of fresh air in the unit as the windows were screwed shut. Few availed themselves of the yard. When asked about this, 60 per cent indicated that they would like to be able to go outside but refrained from doing so because of strip searching on entry and exit from the unit. Those who frequented the yard complained that they were strip searched on their way out of the

TABLE 6. *Impact of current health status*

	Facility (%)	Non-facility (%)
Agrees with the statement:		
'My current health condition…		
limits my physical activities	78	48*
makes me stay indoors	48	22*
prevents me from doing light work'	74	39*
'I am bored most of the time'	57	31*
'Due to health problems, I stay in bed most of the time'	13	7
Total (= 100%)	23	46

* $p < 0.05$

unit, on entering the gym, on exiting the gym and again when entering the facility.

Mealtimes appeared to be the most important activity of the day. Many inmates' existence revolved around meals, not so much for the food perhaps as for the activity and camaraderie. Once they finished their meals, they dispersed into small groups to resume their routines or to take naps. This went on every day unless visitors to the unit interrupted the routine. Few if any work opportunities existed for the geriatric inmates.

In contrast, the non-facility inmates were more likely to work (even though Texas prisoners are unpaid), and to report fewer feelings of boredom and indifference. We specifically asked the general population prisoners about their daily work routine and found that of 46 inmates, 35 had daily work assignments. Of these 35 inmates, 22 worked six to seven days per week (between one to nine hours per day) and 28 inmates worked at the weekends. One (a boiler tender) claimed to work 12 hours per day seven days a week.

These prison workers, despite their advancing age, were satisfied to have the opportunity to work and to stay busy. To a man, they stated that work, no matter how menial, kept their mind off their present situation. The following quotes from two inmates from the general population summarise their feelings about the centrality of work in their lives.

I've worked all my life and prison ain't no different. Now it's not like I get up and run to the job [prison construction]. I don't necessarily like to work. I've got to work to keep m'self busy, you know, occupied. At work I do my job and I also talk to different guys and this keeps me going. It makes the time go by fast. I get up, go to chow, go to work, go to chow, shower, go to chow, and

go to my house [45 of 46 inmates lived in cells, on all three tiers, and one was assigned to a dorm]. It don't sound like much to you but the day they take me off the job they might as well move me into that old guy's dorm [the Geriatric Facility]. (60-year-old construction worker)

I got to work or else I'll go crazy. I mean, I've worked since I was a kid and working keeps me busy and it makes my time go by faster. You know, a routine like gettin' up every day just like out there forces me to be somewhere and no matter what I think about the job, it ain't much, I got something to look forward to. When you do time, and I been doin' time all my life, you got to stay busy. TDC works you and they don't pay you nothin' but staying busy is good. I mean the guys I work with are OK and they ask my advice about things and call me 'Pops' and they give me some respect for where I've been and how I've made it this far. Working and being around those kids keeps me alive and going. I've got to stay busy. (61-year-old laundry worker)

In sum, most of the non-facility respondents were busy and *engaged in the institutional routine*. Large segments of their day were filled with work-related activities and conversations, which left little time for day-dreaming and boredom to take over. We are not suggesting that these men awoke each day eager to go to work, or that hard work made them healthy. Rather, work functioned to connect these men to the same routine as other younger inmates, regardless of age. They had to walk to work, walk to the dining room, to the gym or yard, to the commissary, to the visiting room, to the school/library, to the chapel and, most importantly, to walk alongside men of varying ages. They were engaged and active. In this instance, the institutional regimen served as a 'stimulating' experience, in contrast to the total institution regimen described by Goffman (1961).

Despite our perception that the facility existed in an isolated environment, cut off from the mainstream, most prisoners from both groups overwhelmingly supported the idea that older offenders required sheltering from the general population, particularly from young inmates who might prey on them. Fourteen of those in the facility (61 per cent) agreed with the statement 'Older inmates cannot make it in the general population.' When asked if they would recommend that other states, like Texas, should build specific units for older inmates, 18 (78 per cent) of the facility sample and 27 (59 per cent) of the non-facility sample agreed. There appears to be wide support for such facilities among both older groups. One prisoner reported that he felt 'closed in' and had anxiety attacks from living in cells; he liked the relative open space and freedom to move about the facility dormitory. Among the non-facility respondents, 65 per cent agreed that if their health condition declined, they would prefer placement in a sheltered care or geriatric prison facility.

Further, 17 (74 per cent) of the facility inmates felt safe in their unit, compared with 57 per cent of the non-facility sample. We asked respondents in the non-facility group if they had ever been victimised since their arrival at the Estelle Unit. Fifteen (33 per cent) stated they had been, and of these, nine stated they felt their victimisation was due to age. Several reported that they had been pushed, shoved, and cursed at in the central hallway, and pushed out of line in the dining hall. Another told one of the interviewers that his cell partner had stolen a speaker from his radio and did so because he knew that retaliation was unlikely. Older inmates are not constantly targeted, but the situation exists – to be old in prison is perceived to be a sign of weakness.

Table 4 reports information on the number of visits to the prison infirmary. In addition to the prison system's mandatory annual physical examination, the mean number of doctor visits was approximately two per month for both groups. Analysis of the 1990 *National Health Interview Survey* for non-institutionalised American males aged 50 and above revealed that the average annual number of doctor visits was 9.4 (or less than one per month). Older inmates in both groups visited the infirmary more than twice as often as their non-incarcerated counterparts.

Some infirmary visits can be attributed to legitimate medical needs (*i.e.* insulin shots) but the availability of free medical care, boredom, and the need for social stimulation and personal attention may also play a part in this increased use of the prison health care system. Our findings on the centrality of work for the non-facility sample were critical in understanding the men's potential preoccupation with their bodies and minor health maladies when unmitigated by outside activities. Minor medical conditions may well become a preoccupation among the geriatric facility prisoners because of a lack of outside stimulation and a need for a link to the wider institutional routine.

The respondents were also asked about various activities of daily living (see Table 4). The facility prisoners indicated comparatively more difficulties with, or involving, movement. Many of these older prisoners had difficulty standing or getting up from an armless chair, carrying bags of groceries, going through the food line with their own tray, walking more than one hundred steps, walking to and from the television room, walking up or down two steps, reaching up or bending down to retrieve objects, and doing chores. Movement involving arms and legs and backs was reported by these men to be difficult. While the non-facility sample reported similar difficulties, their percentages were not as pronounced.

Health practitioners' interview data

Realising that recipients and providers of health care (HCPs) often have differing perceptions of health-care issues, we conducted short interviews with medical personnel who worked closely with the facility inmates.

When asked what they consider the most pressing health problem with elderly inmates today, the respondents stated it was the presence of untreated diabetes and hypertension, coronary heart disease, and lung problems. One HCP cited melancholy and institutional malaise as issues. Said one nurse:

> The problem is depression. He's ageing; his body is giving out. He has nothing to look forward to. He is old and sick and has nothing to do but think about and dwell on his condition.

The HCPs were in agreement about the older inmates' earlier lack of preventive care in the wider society and its implications for correctional health care. Most of the men smoked, had poor diets, and had little or no routine or preventive medical care. Those who did see a physician tended to be non-compliant with the doctor's instructions. One nurse described the men's previous lifestyles as 'a lot of hard living'. This hard living was evident in their health condition. All of the HCPs rated the men's overall health status, on entry to prison, as fair to poor with a noticeable deterioration over the course of incarceration.

We asked the HCPs the reasons why most older inmates presented themselves for treatment. Most agreed that, although the men often had legitimate medical needs, others came out of boredom, a need for attention, or to have someone to talk with and listen to them. They estimated that facility inmates visited the clinic an average of at least once a week, but this varied. We asked the HCPs if they thought that older inmates abused clinic privileges. Seven of the eight felt they did, but one thought that abusing the services of a specialist was less likely because of strict policies for referrals.

Most of the respondents stated that the Texas prison system should institute a co-pay system, *i.e.* inmates pay a nominal fee of $2 or $3, for medical services. Camp and Camp (1995) found that nine states in the US have instituted such plans. One worker explained to us that such a system would be difficult to implement and another suggested that an inmate's financial status would need to be carefully considered.

The medical workers voiced unanimous support for the Geriatric Facility. Most stated the facility afforded necessary protection and easier mobility for the men. Several staff members also noted that older

prisoners tended to be victimised by younger inmates and were afraid or unwilling to report the abuse.

Prior to administering our survey we spent time becoming familiar with the day-to-day routines in the facility. During meals, we observed men we later learned to be hypertensive and/or diabetic eating the same foods as the others. This prompted us to ask the HCPs if the men's diets were monitored for compliance to restricted diets. They replied that, because of the difficulty of monitoring the inmates' diets and the fact that the men could refuse to accept a restricted diet, salt and sugar intake, for example, they were not regulated or monitored by appropriate staff. Diabetics ate cake; hypertensives salted their food.

Finally, we asked the HCPs what policy changes they would recommend given an unlimited budget. The most frequent recommendation was to add activities to the men's lives. One respondent noted the need for exercise and physical activity. She recommended gardening as the ideal solution. It would get them moving and outside, she said; it would generate a sense of accomplishment and usefulness, and the harvest could provide fresh vegetables for the men's diets.

Others noted the need for a nurse, social worker, or other HCP who would be dedicated to the facility. This person could become familiar enough with the men to recognise when one was in decline, could monitor compliance to diets, and lead exercise groups and other group activities. Many of the respondents noted a need for outside stimulation to take the men's minds off their bodies and potentially bleak prospects. Several workers cited the men's diets, lack of exercise and boredom, as contributing to declining health and to the men's preoccupation with this decline.

Overall, the HCPs we spoke to noted a lack of pre-prison health care, and felt the medical care provided in prison was a vast improvement over what the men had used on the outside. They cited the multitude of poor health-care habits and suggesed that the men's own neglect, poverty and lack of education worked to their detriment in terms of health status on entry to prison. All agreed the Geriatric Facility met a definite need in the lives of older inmates.

Conclusion

Given poor health condition at arrival, the sequencing of service demands over time, and with age, will increase. In all likelihood older prisoners will consume a disproportionate amount of the overall

correctional health care resources and budget, reflecting the wider society (Anno 1990; Currie 1998).

Only now are prison organisations in America constructing separate wings and living areas for older inmates (Zimbardo 1994), mirroring free world trends (*e.g.* in the development of age-restricted communities). Prison managers have vast experience with young and violent prisoners, but their experience with older inmates is limited and will need to be enhanced as the elderly prisoner population grows.

From our interviews and observations, we found that the Geriatric Facility at Estelle was a necessary component serving a growing need in Texas prisons. Much of the current health status of older prisoners is attributable to poor health-care habits and practices earlier in life in the outside world. These prisoners admitted to drinking, cigarette smoking from a young age, and little to no preventive health care while on the streets. The lack of preventive care as children is especially noteworthy. Few of the factors such as non-smoking, moderate alcohol use, higher socio-economic status, and absence of hypertension, back pain and arthritis that predict higher functioning in later life (Guralnik and Kaplan 1989) are present in the average male inmate, young or old. Because many of these men face long prison sentences (averaging nearly 50 years for both groups) and have numerous conditions that limit physical activity, we expect that their physical decline and the onset of disabling chronic conditions will have major implications for correctional health policy. Inmates in both groups favoured geriatric facilities, and voiced a desire to live there should their health continue to decline. The health condition of future inmates on admission and over the course of confinement, and their health service utilisation patterns will, in all likelihood, parallel the inmate population described in this study. As their physical and mental health condition declines, they too will want to move into age segregated areas.

While these observations provide support, and emphasise the need, for these facilities, a number of heretofore unexplored dimensions need to be addressed by prison managers: sensitivity training for security staff, awareness of the need for productive activities to relieve boredom, recruitment of volunteers to provide social stimulation, (*e.g.* to listen to inmates talk, write letters for them, read to them, etc.), a mandatory 'mobility programme' (limited exercise), assignment of a dedicated health professional to the unit, provision of some kind of work assignment appropriate to their level of activity and physical capability, gaining insights into the unique needs of this population through visits to free-world nursing homes and age-specific communities, balancing security needs with the need for visits to the recreation yard, stricter

monitoring for compliance with specialised diets, and awareness of the growth and health-related trends within this sub-population.

The number of older offenders with long sentences entering prison is small. However, these older long-term prisoners represent 'compound interest' and their total number will certainly grow in the years to come (Walsh 1996). Research needs to ascertain the number of 30- and 40-year-old offenders being sentenced to prison for over 60 years, to establish what life expectancy is in a penal setting, and to survey older, as well as younger, prisoners with long sentences, monitoring their health condition at admission and across their sentence. These data are necessary for budgetary purposes and proactive management decision-making.

The lessons from this study of one state prison system have implications for penal organisations in many other societies. Crime control policies, in no matter what country or political system, based on retributive justice models have long-term consequences for prisoner management, correctional health care delivery systems, and financial resources. Sentencing policies cannot be drafted or implemented in a vacuum. The economics of having these inmates 'serve all' may outweigh the demands of justice and the public policy concerns related to crime prevention. If offenders (no matter what their age) are sentenced to long periods of confinement, there comes the legal and moral obligation to provide basic health care throughout incarceration.

Preventive health-care policies implemented now, before health-care service demands escalate even more, will conserve scarce resources and improve the prisoners' wellbeing. The health practitioners we interviewed all stated that boredom, preoccupation with minor ailments, the need for a 'break in routine' and for social stimulation, motivated many visits to the infirmary. While these visits may appear to be innocuous, they are costly in terms of time, resources and personnel. Keeping older inmates busy, productive and linked to some routine besides meals will help to keep their minds off their ageing bodies and potentially out of the infirmary. Because many are serving long sentences, and many younger inmates will grow old behind bars, proactive measures need to be developed today.

The prison is not isolated from health trends in the wider society. Most prisoners emanate from lower socioeconomic groups, and therefore the inverse relationship between health and income has important consequences for criminal justice organisations, especially the penitentiary. The linkages between socioeconomic status, health condition, and the prisoner population are clear and have major consequences for prison organisations. More older offenders will be

entering prison in the coming years and they will bring with them many illnesses which will have to be managed. It is clear from our study that age-segregated accommodation will be in demand. Whether or not current resources can meet the demand will become a critical political and policy dilemma.

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