Chapter 8

Understanding Elderly PICs at Tai Lam Correctional Institution: Using psychological tests to detect distress and cognitive impairment

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Abstract

Screening tests on psychological distress and cognitive functioning have been administered to elderly male offenders admitted to Tai Lam Correctional Institution (TLCI) to better understand elderly persons-in-custody (PICs) serving time in prison. Among the 267 elderly PICs interviewed, 12% were considered to have severe or extremely severe depression symptoms, 13.1% anxiety symptoms, and 7.8% stress symptoms respectively. In addition, 33.3% perceived themselves having deteriorated cognitive functioning and received further assessments by clinical psychologists; these were later referred to other professional services at outside clinics, when needed. Correlation analyses suggested that PICs with higher levels of distress tended to perceive more cognitive impairment. Despite the significant differences found in the socio-demographic characteristics and convictions between first-time offenders and repeat offenders, the differences in levels of psychological distress and cognitive functioning are statistically insignificant among the two groups. Psychological tests would be helpful in identifying the needs of elderly PICs and bridging access to psychological services.

Participants and procedures

Between 1 August 2018 and 31 July 2020, a total of 267 elderly PICs in TLCI (aged 64 years or above) had consented and completed a set of questionnaires that screened for psychological distress and cognitive functioning. The screening procedures were administered by psychological staff under the supervision of a clinical psychologist. Participants who scored above cut-offs on any of the measures were further assessed by the clinical psychologist.

Evergreen Garden 「松柏園」 is established in Tai Lam Correctional Institution designated for elderly persons in custody to carry out horticultural works.

Measures

Psychological distress

The short version of Depression Anxiety Stress Scales (DASS21) in Chinese translation was used to measure psychological distress (Lovibond and Lovibond, 1995). The measure contains three subscales, namely: Depression, Anxiety and Stress. PICs rated on a 4-point Likert scale, where 0 denotes "did not apply to me at all" and 3 denotes "apply to me very much or most of the time". These ratings indicate how frequently each item applied to the participants. Higher scores indicate more distress.

Cognitive functioning

The Washington University Dementia Screening Test (Galvin et al., 2005) - also known as the "Eight-item Interview to Differentiate Aging and Dementia" (AD8) - in Chinese translation was used to assess PICs' self-perceived changes in cognitive functioning, including memory, orientation, and judgement. PICs who scored above the cut-off were further assessed by a clinical psychologist using the Montreal Cognitive Assessment Hong Kong version (HK-MoCA) or its abbreviated version (HK-MoCA 5-min), which is a standard cognitive screening assessment for dementia in public healthcare settings and has been validated locally with older adults (Wong et al., 2009).

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Results and discussion

PICs' characteristics

PICs included in the study were aged between 64 and 88 years old (M=69.3, SD=4.67) with their length of sentence ranging from 8 days to 16 years 8 months. Repeat offenders accounted for 59.6% of the total sample. The number of readmissions ranged up to 37 counts, with a mean number of admissions at 7.9 times (SD=7.31). Table 1 presents their statuses on admission and offences they were convicted for.

Several differences were found between first-time and recidivist elderly PICs, as shown in Table 2. First-time offenders were older and had shorter sentences compared with repeat offenders. Significant differences were also seen in their convictions (X^2 (14, 267) = 92.206, p < .001). The most common offences of first-time PICs were duty goods related offences (25.9%) and dangerous driving (22.2%), while those for recidivist PICs were theft (26.6%) and drug related offences (22.6%).

Table 1

Elderly PICs' characteristics (n=267)

	n	%
Status		
First time offenders	108	40.4
Repeated offenders	159	59.6
Conviction[a]		
Burglary/ Robbery	4	1.5
Conspiracy to defraud	4	1.5
Dangerous driving (causing death or serious harm)	26	9.7
Deal proceeds of indictable offence	4	1.5
Drug related offence (e.g. possession/trafficking)	38	14.2
Duty goods related (e.g. deal goods contrary to D.C.Ord. or have duty goods unless approved)	53	19.9
Employ unemployable persons	3	1.1
Export unmanifested cargo	4	1.5
Fraud	5	1.9
Managing vice establishment	3	1.1
Possessing obscene article for publishing	8	3.0
Sexual offence (e.g. indecent assault)	17	6.4
Theft	51	19.1
Violence related offence (e.g. common assault, wounding, A.O.A.B.H)	27	10.1
Others	20	7.5

Refer to Appendix A for full list of convictions

Table 2

Differences between first-time and repeat elderly offenders

	First-time offenders		Repeat offenders	
	Mean	**SD**	**Mean**	**SD**
Age	70.1	4.91	68.8	4.44
Sentence length (months)	6.3	6.76	15.3	29.06
	n	%	n	%
Convictions				
Burglary/ Robbery	0	0.0	4	2.5
Conspiracy to defraud	3	2.8	1	0.6
Dangerous driving	24	22.2	2	1.3
Deal proceeds of indictable offence	2	1.9	2	1.3
Drug related offence	2	1.9	36	22.6
Duty goods related	28	25.9	25	15.7
Employ unemployable persons	3	2.8	0	0
Export unmanifested cargo	1	0.9	3	1.9
Fraud	4	3.7	1	0.6
Managing vice establishment	2	1.9	1	0.6
Poss. obscene art. for publish	0	0.0	8	5.0
Sexual offence	13	12.0	4	2.5
Theft	9	8.3	42	26.4
Violence related offence	11	10.2	16	10.1
Others	6	5.6	14	8.8

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The above distinctions were further explored in clinical interviews. Many first-time elderly PICs committing duty goods related offences carried dutiable cigarettes for their own use or resale out of greed. They tended to have underestimated the legal consequences of the offences. For those who committed dangerous driving, many were seasoned professional drivers and attributed their offences to mindless mistakes and misfortune (e.g. 'bad luck'). First-time offenders tended to receive some level of family support. They also reported more hopeful thinking about their life after discharge.

In contrast, recidivist elderly PICs often committed theft and trafficking in dangerous drugs for monetary gains to support their drug use. Their drug use habits also led to convictions for possession of dangerous drugs, using dangerous drugs, and possession of apparatus for drug use. More recidivist PICs had substance abuse issues than first-time PICs among the elderly. Non-drug users were more likely to face financial problems related to gambling and alcoholism. Other offenders may have developed habitual thieving behaviour due to their tight finances after retirement. Many elderly PICs with repeat convictions received limited family support and were dependent on social welfare assistance. They tended to expect little change in their lifestyle after discharge, despite their wish to not return to prison.

Convictions of elderly PICs

Significant differences were observed among elderly PICs with differing convictions. Those who committed duty goods related offences (M=72.5, SD=6.01) were significantly older than those who committed other major offences (mean ages ranges from 67.6 to 68.7 years), apart from dangerous driving (F (5, 206)=7.816, p<.001). This suggests that elderly PICs with financial difficulties might be prone to choosing less intrusive crimes owing to their physical limitations.

Meanwhile, drug related offences resulted in significantly longer sentences for elderly PICs (M=42.1, SD=48.00), more than all other common offences (F(5, 206)=20.320, p<.001). This reflects the seriousness of drug related offences, with no exception given to the elderly.

Psychological distress

Elderly PICs interviewed had a mean score of 6.1 (SD=8.69) on the Depression subscale, 6.8 (SD=8.31) on the Anxiety subscale and 7.0 (SD=9.33) on the Stress subscale using DASS21. They scored significantly lower on the Stress subscale when compared with local male norms (t(994)=-2.245, p<.05), while the differences on the other two subscales were insignificant. Age, length of sentence, and nature of convictions had no significant correlations with all three subscales. The number of admissions to prison also had no significant correlations with the three subscales, which debunked the myth that recidivist PICs experience less distress in prison because of their prior experiences.

Local cut-off scores for males using DASS21 were adopted to categorize elderly PICs into different levels of severity (normal, mild, moderate, severe, and extremely severe). Among all those interviewed, 12% were considered to have depression symptoms, 13.1% anxiety symptoms, and 7.8% stress symptoms, ranging from severe or extremely severe levels respectively. Table 3 shows the detailed distribution of severity on each subscale. In the current study, elderly PICs who had reported moderate levels of severity or above on any of the subscales were assessed individually by a clinical psychologist. Follow-up psychological services were provided whenever appropriate.

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Table 3

Distribution of Depression, Anxiety and Stress Severity among elderly PICs

DASS Subscale	Normal n(%)	Mild n(%)	Moderate n(%)	Severe n(%)	Very Severe n(%)
Depression	203(76)	11(4.1)	21(7.9)	16(6.0)	16(6.0)
Anxiety	197(73.8)	16(6.0)	19(7.1)	14(5.2)	21(7.9)
Stress	211(79%)	24(9.0)	11(4.1)	11(4.1)	10(3.7)

Over half of the PICs presented the following symptoms: 'dryness in the mouth' (53.2%), 'feeling like using up a lot of nervous energy' (41.9%), 'could not seem to have positive feelings' (39.3%), and 'finding it hard to wind-down' (39%); these symptoms were commonly mentioned by both first-time and recidivist elderly PICs. Some relatively less common symptoms such as 'feeling life was meaningless' and 'not feeling worth much as a person' were further endorsed by more than 16% first-time, and 20% recidivist PICs respectively.

Cognitive functioning

Among 89 participants (33.3%) who scored above the cut-off on AD8 with a mean score of 4.2 (SD=1.82), significant positive correlations were found between their scores on AD8 and Depression, Anxiety, and Stress subscales of DASS21 (r=.245, .234 and .332 correspondingly, all p<.01). In other words, the more psychologically distressed the PICs were, the more cognitive impairment they perceived and vice-versa.

For PICs scoring above the cut-off on AD8, 72 (91.1%) received further assessment with HK-MoCA and seven were assessed by HK-MoCA 5-min (8.9%). Ten did not complete further assessment due to various reasons, including prior dementia assessments, diagnoses and treatment received in outside hospitals, serious hearing impairment, and refusals to be assessed.

A negative correlation was found between AD8 and HK-MoCA scores among PICs who had taken both tests (r=-3.12, p=.008). This may be because HK-MoCA was conducted when PICs had a stable mood and were not experiencing any major distress. Under such conditions, PICs' cognitive functioning would be less likely to be influenced by their mood and could be tested more accurately. This correlation is consistent with the significant correlations found between AD8 and all three subscales on DASS21 while HK-MoCA scores had no such correlations with any of the three subscales.

Table 4 presents the distribution of percentiles on HK-MoCA and HK-MoCA 5-min of participants who had completed the tests (n=79).

Table 4

Distribution of Percentiles on HK-MoCA and HK-MoCA 5-min

Test	Between 16th and 7th percentile (%)	Between 16th and 7th percentile (%)	Between 7th and 2nd percentile (%)	<2nd percentile (%)
HK-MoCA/ HK-MoCA 5-min	66(83.5)	7(8.9)	4(5.1)	2(2.5)

The majority of elderly PICs who had reported signs of deteriorated cognitive functioning were found to rank 16th or higher alongside their corresponding age/education level peers in HK-MoCA, suggesting no significant impaired cognitive functioning at the time of assessment when compared with their corresponding peers. The result implied that elderly PICs' perception of their cognitive functioning might not reflect their actual ability. Most elderly PICs' perceived changes in cognitive function were actually within a normal range. Normalizing the change of cognitive ability associated with aging could help elderly PICs better accept the changes and help alleviate the associated psychological distress. Elderly PICs who ranked below the 7th percentile were referred for further assessments at outside clinics.

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Implications

In addition to identifying the psychological needs of elderly PICs, the adoption of psychological tests has improved their access to institutional services. Firstly, elderly PICs could get in touch with psychological services when they interacted directly with psychological staff during the administration of tests. While they could have a brief taste of receiving psychological services, informal observations and information obtained during their interactions provided additional understanding of PICs' mental condition. Secondly, PICs who scored above cut-offs were invited for individual clinical interviews with a clinical psychologist. Many of the elderly PICs who were interviewed expressed little or no prior experience of individual psychological services. Initially, they had reservations about receiving psychological services, but were willing to come for further assessment, and some even showed readiness and motivation to attend follow-up sessions for psychological services when needed.

Limitation

The current findings were based on the data of elderly PICs serving in TLCI, a male, minimum-security institution, and might not be a representative sample of the overall elderly penal population. Further research is needed to understand the general elderly penal population in other correctional institutions.

Conclusion

The use of psychological tests has facilitated identification of emotional needs and cognitive impairment in elderly PICs for further interventions at TLCI. Apart from its screening purposes, these tests could act as a mean to bridge the gap between PICs and psychological services, to identify those in needs, and normalize the attitude of those seeking psychological service. Furthermore, it has helped improve the overall understanding of the needs of elderly PICs for future service planning and development.

An elderly person-in-custody and a psychological staff appreciate the horticultural products inside the Evergreen Garden.

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Appendix A

List of convictions of elderly PICs

Conviction	Counted as
A.O.A.B.H	Violence-related
Agent Accepts any advantage	Others
Arrange passage to HK of II	Others
Assault/resist/mislead police	Others
B. for closed area regulations	Others
Breach of deportation order	Others
Burglary	Burglary/Robbery
Cause animal to suffer	Others
Cause grievous bodily harm by dangerous driving	Dangerous driving
Causing death by dangerous driving	Dangerous driving
Common assault	Violence-related
Conspiracy to defraud	Conspiracy to defraud
Criminal intimidation	Violence-related
Deal gds contrary to D.C. Ord.	Duty goods related
Deal proceeds of indict. Offen.	Deal proceeds of indict. Offen.
Desecrating the national flag	Others
Destroy/damage other property	Violence-related
Driving influ by drink or drug	Others
Employ unemployable persons	Employ unemployable persons
Explode, throw corrosive fluid	Violence-related
Export endangered appendix II/I	Others
Export unmanifested cargo	Export unmanifested cargo
Fail to surrender to custody	Others
Fraud, induce others to commit	Fraud
Have duty gds unless approved	Duty goods related
Import unmanifested cargo	Others
Indecent assault	Sexual offence
Inhale, smoke or inject D.D.	Drug-related
Keep unlic. hotel/guesthouse	Others
Manage a vice establishment	Manage a vice establishment
Non-payment of fine	Others
Not available in code table	Others
Obtain property by deception	Fraud
Operate gambling est.	Others
Poss obscene art for publish	Poss obscene art for publish
Poss. & use forged I/D card	Others
Poss dutiable good w/o permit	Duty goods related
Poss. App. F&I for injection D.D.	Drug-related
Poss. Arm or ammunition w/o lic	Violence-related
Poss. of O/W in a public place	Violence-related
Possess child pornography	Sexual offence
Possess infring. Copy for trade	Others
Possession of D.D.	Drug-related
Practice Chn medicine w/o registration	Others
Removal ptt. after bankruptcy	Others
Restrain instruct./offensive	Violence-related
Robbery	Burglary/Robbery
Sell/let for hire infring. Copy	Others
Theft	Theft
Trafficking in D.D.	Drug-related
Wounding	Violence-related
Wounding with intent	Violence-related