Driver assessment service for people with mental illness

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Abstract
Mental illness often leads to functional deficits that likely affect one’s driving performance and may even pose threat to other road users. However, having a mental illness does not automatically preclude one from driving which is essential to mobility and productivity. Indeed, evaluating their fitness-to-drive would be of necessary. Despite that, there is still a lack of a local driving evaluation service that specifically addresses the impact of mental illness on driving capacity. This paper discusses the needs to evaluate the fitness-to-drive of people with mental illness. It advocates the development of such specific driver assessment service with a local example as illustration. Lastly, some of the challenges related to the drivers’ responsibility to declare personal health status and large variety of assessment approaches are also discussed.

Keywords
Fitness to drive, mental illness, driver assessment, driving evaluation

Introduction
Driving signifies independent community mobility and productivity. It is a complex task requiring a range of skills, such as cognitive, sensorimotor and psychosocial skills (Driver & Vehicle Licensing Agency, 2019). However, drivers with mental illness or those using psychotropic medications often experience functional deficits that would affect their driving performance and may increase risk of traffic accidents (Ménard & Korner-Bitensky, 2008). It is of great concern on how to identify this risky driver group. In this commentary, several issues regarding driver assessment for people with mental illness are examined. Firstly, the impact of mental illness on driving is briefly reviewed. Secondly, the needs for driving assessment are explored. Thirdly, the development of assessment centre for drivers with special needs is advocated and illustrated with a local example in mental health institute. Lastly, some of the challenges ahead are discussed.

Driving and mental illness
According to the safe driving practice guidelines from different countries, mental illnesses are considered as clinical conditions that would affect one’s fitness-to-drive (Austroads, 2016; RoadSafetyBC, 2016). People with mental illnesses are associated with higher risk of vehicle crashes (Charlton et al., 2010). In particular, drivers with schizophrenia are reported to have a risk of car accidents approximately two times greater than that of age-matched controls (Edlund, Conrad, & Morris, 1989). Their driving capacity is affected by their respective symptoms, including psychomotor impairment (De las Cuevas, Ramallo, & Sanz, 2010), cognitive deficits (Green, Kern, Braff, & Mintz, 2000) and the side effects of medication (Ménard & Korner-Bitensky, 2008) (Table 1). The fluctuating nature of mental illnesses would further complicate their prognosis as well as their fitness-to-drive (Unsworth, 2010).

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Need for evaluation of drivers with mental illness

Although mental illness likely affects one’s driving capacity, it is estimated that there is a significant portion of drivers with mental illness in community. Rouleau, Mazer, Ménard, and Gautier (2010) and Rowse (2010) have reported that around 30–40% of people with mental illness in Canada and Australia continue to drive. However, as revealed by Rouleau et al. (2010), it is uncertain how often driving assessment was offered to those drivers with mental illness. Other surveys on driver assessment practice have indicated that majority of their clientele are mainly those with physical or aging conditions, such as traumatic brain injury, stroke or mild cognitive impairment, rather than mental illness (Korner-Bitensky, Bitensky, Sofer, Man-Son-Hing, & Gelines, 2006; Vrkljan, Myers, Crizzle, Blanchard, & Marshall, 2013). Audit reports have also shown that driving and license status of drivers with mental illness is not routinely addressed by clinicians in their case management (Orr & Elworthy, 2008; Yaqub, Ismail, Babiker, & Rao, 2016). Dun, Bull et al. (2015) even explicitly commented that ‘driving is often omitted or ignored during assessment and ongoing work with consumers of mental health services’ (p. 536). This may be due to the low confidence of clinicians in determining client’s fitness-to-drive (Marshall, Demmings, Woolnough, Salim, & Man-Son-Hing, 2012). Inadequate awareness of driving-related legislation or standards; limited resources for the clinicians, clients and families; and insufficient knowledge in driving-related practice are the other challenges that impede the development of driving assessment service for those with mental illness (Curwen & Jebreel, 2012; Dun, Baker, Swan, Vlachou, & Fossey, 2015; Ménard et al., 2012).

| Condition                          | Possible effects on functional ability to drive                                                                 | Medication side effects relevant to driving                                                                 |
|------------------------------------|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Schizophrenia                      | • Deficits in attention, executive function, learning, and memory (Green et al., 2000)                          | • Reduced psychomotor performance for those taking Haloperidol and Risperidone (Brunnauer, Laux, & Zwick, 2009; Soyka et al., 2005) |
|                                    | • Impairment in motor and tactile dexterity (RoadSafetyBC, 2016)                                               | • Antihistaminic and/or anticholinergic effects of antidepressants that cause somnolence or sedation, resulting in cognitive difficulties, attentional deficits, indecisiveness and psychomotor impairment (Khawam, Laurencic, & Malone, 2006; Ménard et al., 2008) |
| Depression/bipolar affective disorder | • Reduced concentration, memory, information processing, reaction time and psychomotor function (Bulmash et al., 2006; Charlton et al., 2010; Ménard et al., 2008) | • Sleepiness and reduced concentration for those taking Benzodiazepine (Dubois, Bédard, & Weaver, 2008) |
| Anxiety disorder                   | • Reduced attention, executive function, memory and perseveration of errors (‘freezing’) regarding unexpected risks on the road (RoadSafetyBC, 2016) | • Significantly impaired harsh-braking for those taking Diazepam (Takahashi et al., 2010) |
| Attention deficit hyperactivity disorder (ADHD) | • Deficits in in planning and forethought, working memory; difficulty sustaining focus, shifting focus, or filtering out distractions; and impaired processing speed (RoadSafetyBC, 2016) | • Not applicable |
|                                    | • Difficulty in self-monitoring and regulating impulsivity (Barkley & Cox, 2007)                                |                                                                                                          |
| Personality disorder               | • Poor interpersonal functioning, increased affectivity (e.g. aggression or anger) and poor impulse control (RoadSafetyBC, 2016) | • Not applicable |

Table 1. Impacts of mental illnesses and medication side effects on driving.
provided by occupational therapists specialised in mental health practice and with recognised training in driving assessment (Dun, Baker et al., 2015; Dun, Bull et al., 2015).

Driving assessment is imbedded in occupational therapy practice. Occupational therapists have conducted study to identify attributes that associated with traffic accidents in Hong Kong. Findings show that impulsivity is associated with risk-taking driving behaviours. Highly impulsive drivers carry out more risk-taking behaviours and are less able to inhibit responses than those with low impulsivity (Cheng & Lee, 2012). Findings also show that driving behaviours are related to how the drivers perceive their vulnerability and causes of road traffic accident (Cheng & Ng, 2012). For those who drive as part of their occupation, they are more prone to drive recklessly and commit traffic offences because of work stress and less sensitive to consequence of risk-taking driving behaviour (Cheng, Ting, Liu, & Ba, 2016). In 2012, the occupational therapy profession in Singapore, the first in Asian countries, was appointed to provide mandatory driving assessment for drivers aged 73 who would like to continue their Taxi Driver’s Vocational Licence for another two years (Sim, 2012). However, driving assessment service specific to people with special need is still scarce in local clinical settings.

In Hong Kong, according to Road Traffic (Driving Licenses) Regulations, Cap 374B (1984), drivers must declare any diseases or conditions that are likely to render them incapable of driving safely and effectively. Medical doctors are usually asked by the Transport Department to comment on the driving capacity of their clients. The Occupational Therapy Department of Castle Peak Hospital has piloted the driver assessment service to clients with mental health in its catchment area since 2015. Four occupational therapists who have extensive experience in psychiatric rehabilitation and completed certified training in driver assessment are currently responsible for service delivery.

Framework of driver assessment was developed to examine the impact of mental conditions on driving capacity (Figure 1) with the following assessment principles that were adopted from the existing safe driving practice guideline (RoadSafetyBC, 2016):

- Primary concerns are driving safety and risk to other road users.
- Functional approach is incorporated for evaluation.
- Presumed characteristics of particular diagnostic groups are not the solely determining factors on one’s fitness-to-drive.
- Recommendations on fitness-to-drive are based on the best information gathered during the assessment.

The first part of assessment includes screening assessments on sensorimotor, cognitive and psychosocial functions to identify deficits related to driving. Another core component is functional assessment with the use of simulator. In the simulated road assessment, clients would drive a standardised route with common road situations such as roundabouts, unmarked lanes, different speed limit, etc. Basic driving skills and road hazard handling were evaluated throughout the driving simulation. Mental condition and driving behaviour such as impulsivity or risk-taking are also taken into account when concluding their driving capacity. Most importantly, drivers’ responsibility to report to the Transport Department on their health conditions is educated to clients. Report including test results of the driving assessment and recommendations on driving fitness of clients would be compiled to the case psychiatrist.

There are several service characteristics that could further illustrate the driving issues and service need of people with mental illness. Concerning the driving status, around 94% of them were holding a valid driving license and more than half of them were commercial vehicle drivers at the time of assessment (Figure 2). They were either driving or on sick-leave but planned

Figure 1. Framework of driver assessment for people with mental illness.
to resume driving afterwards, indicating an imminent need to assess their fitness-to-drive. When it comes to client’s characteristics, the major diagnosis was mood disorder, followed by Schizophrenia. There were around 42% of clients deemed to have inadequate driving capacity, in which the presence of significant cognitive deficits was far more prevalent than physical impairments. The most prevalent driving skill deficit identified during the simulated road assessment was hazard handling, followed by observation, planning and judgment, and vehicle positioning, while the deficits in physical control of vehicle and reaction time were relatively less common. These certainly show the importance to have a comprehensive assessment on various domains of clients’ functional status, driving skills and behaviours. Lastly, our recommendations on clients’ driving capacity were found consistent with that of their medical reports submitted by the psychiatrists to the Transport Department. All the above illustration elucidates some particular features of driver assessment for people with mental illness, but it is also limited to the experience of a single psychiatric hospital only and may not fully represent the entire population in Hong Kong. Indeed, such driver assessment service should be expanded locally to benefit more clients, and further studies should be conducted to advance our understanding in driving-related practice.

Challenges ahead

De las Cuevas and Sanz (2008) studied the driving capacity of 208 stable outpatients with mental illness, of which 80% scored below the required standard to obtain a driving license. However, none of the subjects who actually held a driving license and drove daily had reported their mental conditions to relevant traffic authority. These ‘hidden’ at-risk drivers undoubtedly pose a threat to other road users. Such under-reporting was also observed in our service as around 80% of clients did not report to the Transport Department regarding their health status. The majority of them explained that they were not aware of the responsibility to declare. Another possible reason would be the lack of mandatory driver evaluation and reporting system to the authority after the onset of mental illness. However, given the concerns of breaching confidentiality and resulting into legal conviction, it would be a dilemma for a medical professional to take initiative to report to Transport Department on risky drivers for the sake of public safety without the consent from them. Also, the consequence of reporting might contribute to the under-reporting. Around 60% of our clients were commercial vehicle drivers and their employment or even livelihood would be seriously affected in case of the suspension of their driving licenses. Worries about the license removal after reporting would likely reduce their motivation to declare their health status or to sit for a driving assessment. Lastly, the fact that some people with mental illness are likely to have inadequate insight on their mental illnesses would further prevent them from taking initiative to declare. Therefore, education on the legal responsibility to report is extremely important and should be the key focus of a driver assessment. The possibility of unemployment arising from driving license removal should also be addressed. Work resettlement service should be considered as a follow-up for exploring other employment opportunities and facilitating changes in their worker role.

Another challenge concerns with the choice of assessment tools for determining driving fitness. In fact, driving assessment practices vary greatly and there is no universally accepted guidance on what exactly constitutes a ‘suitable’ or the ‘best’ assessment (Korner-Bitensky et al., 2006; Vrkljan et al., 2013). There exist different types of tests to measure driving capacity across diagnostic groups, including standardised batteries (Unsworth et al., 2012) or domain-specific assessments (Kay, Bundy, & Clemson, 2009; Myers, Ball, Kalina, Roth, & Goode, 2000). Also, the context of assessment might utilise on-road situation (Kay, Bundy, Clemson, & Jolly, 2008), off-road situation (Unsworth, Lovell, Terrington, & Thomas, 2005) or a simulated road environment (Bédard, Parkkari, Weaver, Riendeau, & Dahlquist, 2010). There are also assessments for specific drivers’ attributes or driving behaviour, namely impulsivity or risk taking (Cheng, Ng, & Lee, 2012; Cheng et al., 2016).
Among these, simulated driving test seems to be an emerging evaluation method being applied to different conditions such as Alzheimer’s disease (Frittelli et al., 2009), traumatic brain injury (Lew et al., 2005), stroke (Akinwuntan, Wachtel, & Rosen, 2012), attention deficit hyperactivity disorder and autism spectrum disorder (Classen, Monahan, & Wang, 2013) and mental illness (Brunnauer et al., 2009). There are a number of advantages of using simulator to evaluate driving capacity. Firstly, it provides situational assessment to assess clients’ ability to handle traffic under a safe and controlled environment. It seems to be particularly suitable for assessing the driving fitness of people with mental illness, in which driving-related cognitive deficits are quite prevalent among them. Another longitudinal study on elderly at-risk drivers (Lee & Lee, 2005) and a comparison study using on-road tests (Lee, Cameron, & Lee, 2003) have demonstrated that a simulator seems to be a reliable, valid and practical tool for identifying at-risk drivers. Secondly, real-life traffic and specific road conditions can be simulated, and this is especially useful to assess clients’ behaviour in hazardous situations (Underwood, Curndall, & Chapman, 2011) which cannot be controlled during on-road evaluation. Thirdly, instant feedback could be provided to clients, allowing them to ‘visualise’ their driving ability and improving insight into their driving capacity.

Conclusion

Having mental illness is not necessarily equal to absolute inability to drive. Instead, fitness-to-drive of individuals with mental illness should be examined carefully before they drive. A specialised driver assessment that addresses the unique characteristics of mental illnesses is certainly needed. However, such service is scarce locally and it requires specially trained professionals. Occupational therapists specialised in both mental health practice and driver assessment does play a vital role in this emerging area. Such driving assessment service should definitely be expanded in the psychiatric field to address the needs of clients, and more studies are recommended to further enhance driving-related practice in Hong Kong.

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References

Akinwuntan, A. E., Wachtel, J., & Rosen, P. N. (2012). Driving simulation for evaluation and rehabilitation of driving after stroke. Journal of Stroke and Cerebrovascular Diseases, 21(6), 478–486.

Austroads (2016). Assessing fitness to drive for commercial and private vehicle drivers: Medical standards for licensing and clinical management guidelines. Sydney: Author.

Barkley, R. A., & Cox, D. (2007). A review of driving risks and impairments associated with attention-deficit/hyperactivity disorder and the effects of stimulant medication on driving performance. Journal of Safety Research, 38(1), 113–128.

Bédard, M., Parkkari, M., Weaver, B., Riendeau, J., & Dahlquist, M. (2010). Assessment of driving performance using a simulator protocol: Validity and reproducibility. American Journal of Occupational Therapy, 64(2), 336–340.

Brunnauer, A., Laux, G., & Zwick, S. (2009). Driving simulator performance and psychomotor functions of schizophrenic patients treated with antipsychotics. European Archives of Psychiatry and Clinical Neuroscience, 259(8), 483–489.

Bulmash, E. L., Moller, H. J., Kayumov, L., Shen, J., Wang, X., & Shapiro, C. M. (2006). Psychomotor disturbance in depression: Assessment using a driving simulator paradigm. Journal of Affective Disorders, 93(1), 213–218.

Charlton, J., Koppel, S., O’Hare, M., Andrea, D., Smith, G., Khodr, B., ..., Fildes, B. (2010). Influence of chronic illness on crash involvement of motor vehicle drivers (Report No. 300). Clayton, Australia: Monash University Accident Research Center (MUARC).

Cheng, A.S., & Lee, H.C. (2012). Risk-taking behavior and response inhibition of commuter motorcyclists with different levels of impulsivity. Transportation Research Part F, 15, 535–543.

Cheng, A.S., & Ng, T.C.K. (2012). Risky driving and the perception of motorcycle accident causes among Chinese motorcyclists in Hong Kong. Traffic Injury Prevention, 13, 485–492.

Cheng, A. S., Ng, T. C., & Lee, H. C. (2012). Impulsive personality and risk-taking behavior in motorcycle traffic offenders: A matched controlled study. Personality and Individual Differences, 53(5), 597–602.

Cheng, A. S., Ting, K. H., Liu, K. P., & Ba, Y. (2016). Impulsivity and risky decision making among taxi drivers in Hong Kong: An event-related potential study. Accident Analysis & Prevention, 95, 387–394.

Classen, S., Monahan, M., & Wang, Y. (2013). Driving characteristics of teens with attention deficit hyperactivity and autism spectrum disorder. American Journal of Occupational Therapy, 67(6), 664–673.

Curwen, J., & Jebreel, A. (2012). Advice on driving while under the care of a crisis resolution team: Findings from two audits. The Psychiatrist Online, 36(11), 424–426.
De las Cuevas, C., Ramallo, Y., & Sanz, E. J. (2010). Psychomotor performance and fitness to drive: The influence of psychiatric disease and its pharmacological treatment. *Psychiatry Research*, 176(2), 236–241.

De las Cuevas, C., & Sanz, E. J. (2008). Fitness to drive of psychiatric patients. *Primary Care Companion to the Journal of Clinical Psychiatry*, 10(5), 384.

Driver & Vehicle Licensing Agency. (2019). *Assessing fitness to drive – A guide for medical professionals*. Retrieved from https://www.gov.uk/government/publications/assessing-fitnness-to-drive-a-guide-for-medical-professionals

Dubois, S., Bédard, M., & Weaver, B. (2008). The impact of benzodiazepines on safe driving. *Traffic Injury Prevention*, 9(5), 404–413.

Dun, C., Baker, K., Swan, J., Vlachou, V., & Fossey, E. (2015). “Drive Safe” initiatives: An analysis of improvements in mental health practices (2005–2013) to support safe driving. *British Journal of Occupational Therapy*, 78(6), 364–368.

Dun, C., Bull, B. J., Hitch, D., Lhuede, K., Vlachou, V., & Swan, J. (2015). Supporting safe driving practices among consumers of mental health services: Guidelines for assessment. *Psychiatric Services*, 66(5), 536–538.

Edlund, M. J., Conrad, C., & Morris, P. (1989). Accidents among schizophrenic outpatients. *Comprehensive Psychiatry*, 30(6), 522–526.

Frittelli, C., Borghetti, D., Ludicze, G., Bonanni, E., Maestri, M., Tognoni, G., … Ludicze, A. (2009). Effects of Alzheimer’s disease and mild cognitive impairment on driving ability: A controlled clinical study by simulated driving test. *International Journal of Geriatric Psychiatry*, 24(3), 232–238.

Green, M. F., Kern, R. S., Braff, D. L., & Mintz, J. (2000). Neurocognitive deficits and functional outcome in schizophrenia: Are we measuring the “right stuff”? *Schizophrenia Bulletin*, 26(1), 119–136.

Kay, L. G., Bundy, A. C., & Clemson, L. M. (2009). Predicting fitness to drive in people with cognitive impairments by using DriveSafe and DriveAware. *Archives of Physical Medicine and Rehabilitation*, 90(9), 1514–1522.

Kay, L., Bundy, A., Clemson, L., & Jolly, N. (2008). Validity and reliability of the on-road driving assessment with senior drivers. *Accident Analysis & Prevention*, 40(2), 751–759.

Khawam, E. A., Laurencic, G., & Malone, D. A. (2006). Side effects of antidepressants: An overview. *Cleveland Clinic Journal of Medicine*, 73(4), 351.

Korner-Bitensky, N., Bitensky, J., Sofer, S., Man-Son-Hing, M., & Gelinas, I. (2006). Driving evaluation practices of clinicians working in the United States and Canada. *American Journal of Occupational Therapy*, 60(4), 428–434.

Lee, H. C., Cameron, D., & Lee, A. H. (2003). Assessing the driving performance of older adult drivers: On-road versus simulated driving. *Accident Analysis & Prevention*, 35(5), 797–803.

Lee, H. C., & Lee, A. H. (2005). Identifying older drivers at risk of traffic violations by using a driving simulator: A 3-year longitudinal study. *American Journal of Occupational Therapy*, 59(1), 97–100.

Lew, H. L., Poole, J. H., Lee, E. H., Jaffe, D. L., Huang, H. C., & Brodd, E. (2005). Predictive validity of driving-simulator assessments following traumatic brain injury: A preliminary study. *Brain Injury*, 19(3), 177–188.

Marshall, S., Demnings, E. M., Woolnough, A., Salim, D., & Man-Son-Hing, M. (2012). Determining fitness to drive in older persons: a survey of medical and surgical specialists. *Canadian Geriatrics Journal*, 15(4), 101.

Ménard, I., Benoit, M., Boulé-Laghzali, N., Hébert, M. C., Parent-Taillon, J., Pérusse, J., … Korner-Bitensky, N. (2012). Occupational therapists’ perceptions of their role in the screening and assessment of the driving capacity of people with mental illnesses. *Occupational Therapy in Mental Health*, 28(1), 36–50.

Ménard, I., & Korner-Bitensky, N. (2008). Fitness-to-drive in persons with psychiatric disorders and those using psycho-tropic medications: A systematic review. *Occupational Therapy in Mental Health*, 24(1), 47–64.

Myers, R. S., Ball, K. K., Kalina, T. D., Roth, D. L., & Goode, K. T. (2000). Relation of useful field of view and other screening tests to on-road driving performance. *Perceptual and Motor Skills*, 91(1), 279–290.

Orr, E. M., & Elworthy, T. S. (2008). Audit of advice on driving following hospitalisation for an acute psychotic episode. *The Psychiatrist*, 32(3), 106–107.

Road Traffic (Driving Licenses) Regulations, Cap 374B § 5 & 8 (1984).

RoadSafetyBC. (2016). *CCMTA medical standards for drivers with BC specific guidelines*. Retrieved from British Columbia government website: https://www2.gov.bc.ca/gov/content/transportation/driving-and-cycling/driver-medical/driver-medical-fitness/driver-medical-fitness-information-for-medical-professionals/ccmta-medical-standards-bc-specific-guidelines-quick-access

Rouleau, S., Mazer, B., Ménard, I., & Gautier, M. (2010). A survey on driving in clients with mental health disorders. *Occupational Therapy in Mental Health*, 26(1), 85–95.

Rowse, J. (2010). Changing knowledge and practice: Mental health service delivery and consumer fitness to drive (Unpublished doctoral dissertation). Australia: La Trobe University.

Sim, R. (2012, April). Age limit for cabbies raised to 75. *The Straits Times*, A28.

Soyka, M., Winter, C., Kagerer, S., Brunnauer, M., Laux, G., & Möller, H. J. (2005). Effects of haloperidol and risperidone on psychomotor performance relevant to driving ability in schizophrenic patients compared to healthy controls. *Journal of Psychiatric Research*, 39(1), 101–108.

Takahashi, M., Iwamoto, K., Kawamura, Y., Nakamura, Y., Ishihara, R., Uchiyama, Y., … Iidaka, T. (2010). The effects of acute treatment with tandospirone, diazepam, and placebo on driving performance and cognitive function in healthy volunteers. *Human Psychopharmacology: Clinical and Experimental*, 25(3), 260–267.

Underwood, G., Crundall, D., & Chapman, P. (2011). Driving simulator validation with hazard perception.
Transportation Research Part F: Traffic Psychology and Behaviour, 14(6), 435–446.

Unsworth, C. A. (2010). Issues surrounding driving and driver assessment for people with mental health problems. Mental Health Occupational Therapy, 15(2): 41–44.

Unsworth, C. A., Baker, A., Taitz, C., Chan, S. P., Pallant, J. F., Russell, K. J., & Odell, M. (2012). Development of a standardised Occupational Therapy – Driver Off-Road Assessment Battery to assess older and/or functionally impaired drivers. Australian Occupational Therapy Journal, 59(1), 23–36.

Unsworth, C. A., Lovell, R. K., Terrington, N. S., & Thomas, S. A. (2005). Review of tests contributing to the occupational therapy off-road driver assessment. Australian Occupational Therapy Journal, 52(1), 57–74.

Vrkljan, B. H., Myers, A. M., Crizzle, A. M., Blanchard, R. A., & Marshall, S. C. (2013). Evaluating medically at-risk drivers: A survey of assessment practices in Canada [Evaluation des conducteurs médicalement vulnérables: Un sondage des pratiques en matière d’évaluation au Canada]. Canadian Journal of Occupational Therapy, 80(5), 295–303.

Yaqub, M., Ismail, S., Babiker, S., & Rao, T. S. (2016). Psychiatrists’ responsibilities with regards to patients’ fitness to drive. Indian Journal of Psychiatry, 58(3), 287.