Knowledge and expectations of direct support professionals towards effects of psychotropic drug use in people with intellectual disabilities

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Background/Introduction: In this study, we investigated intellectual disability support professionals' knowledge and expectations towards effects of psychotropic drug use on behaviour and drug use in their clients, because shortcomings may lead to misinterpretations of behavioural symptoms and inappropriate drug use.

Methods: Two self-designed questionnaires were used to measure the knowledge and expectations of 194 support professionals in 14 residential facilities regarding psychotropic drug use and effects of antipsychotics on behavioural, cognitive and mental functioning of people with intellectual disability. The psychometric properties of both questionnaires were adequate.

Results: A majority of the professionals had unrealistic expectations regarding the positive effects of antipsychotics on cognitive and behavioural functioning, and 94% scored below the cut-off scores regarding knowledge; 60% indicated they needed education and training.

Conclusions: To achieve sufficient collaboration of intellectual disability support professionals in reducing inappropriate psychotropic drug use of clients, vocational educational training is needed.

Keywords: attitudes, behavioural symptoms, intellectual disability, knowledge, psychotropic drugs, support professionals

1 INTRODUCTION

People with intellectual disabilities frequently use psychotropic drugs, often for unlicensed indications such as aggressive and other challenging behaviours, and often in the absence of a formal diagnosed psychiatric disorder (De Kuijper et al., 2010; Ghosh, Arulrajan, & Baldwin, 2010; Scheifes et al., 2013; Sheehan et al., 2015). Among these prescriptions, those for antipsychotic drugs are the most frequent. Although some studies have shown that antipsychotics may be efficacious in treatments of challenging behaviours, the quality of these studies is generally poor (Deb et al., 2014; McQuire, Hassiotis, Harrison, & Pilling, 2015; Scheifes, Stolker, Egberts, Nijman, & Heerdink, 2011) and serious side effects frequently occur (Bhuvaneswar, Baldessarini, Harsh, & Aplert, 2009; De Kuijper, Mulder, Evenhuis, Scholte, Visser, & Hoekstra, 2013; Matson & Mahan, 2010). Some studies have shown that discontinuation of antipsychotics used for behavioural symptoms is possible without behavioural deterioration (Ahmed et al., 2000; De Kuijper, Evenhuis, Minderaa, & Hoekstra, 2014; Sheehan & Hassiotis, 2016). Furthermore, experts in the field unanimously advise clinicians to reduce their off-label psychotropic drugs prescription practice in people with intellectual disability (Glover, Bernards, Branford, Holland, & Strydom, 2014; Oliver-Africanou, Murphy, & Tyrer, 2009; Tsioris, 2010). However, a change in policies is difficult, as is illustrated in the study of Sheehan et al. (Sheehan et al., 2015).

In clinical practice, successful discontinuation of psychotropic drugs for unlicensed indications may be difficult. De Kuijper et al.
(2014) found a decrease in maladaptive behaviour during and following antipsychotics’ discontinuation as measured with the Aberrant Behaviour Checklist; however, support professionals perceived no improvement or even a worsening in the behaviour of their service user as was measured with a Visual Analogue Scale. Possibly, their perceptions may have been influenced by beliefs of worsening in behaviour following dose reduction.

Indeed, studies have shown the influence of attitudes and cognition of support professionals and staff on behaviour and psychotropic drug use of their service users with intellectual disabilities (Aman, Singh, & Fitzpatrick, 1987; Christian, Snyderski, Singh, & Poling, 1999; Singh et al., 1996). Professionals indicated aggression, anxiety, self-injury, delusions and other psychiatric disorders in people with intellectual disabilities were mostly indications for psychotropic drug use and that behaviour modification could be an alternative for medication use. Moreover, they indicated they had need for training and education in management of challenging behaviour and effects of psychotropic drug use. Fretwell (Fretwell & Felce, 2007) demonstrated a lack of knowledge of antipsychotic drug side effects in community disability workers, and Donley (Donley, Chan, & Webber, 2011) found disability support workers needed more knowledge and education about psychotropic drug use. Also, studies in other long-term care settings have shown there is need for psychiatric training and education in effects of psychotropic drug use (Nishtala, McLachlan, Bell, & Chen, 2008; Sullivan, Cole, Gordon, Hahn, & Kathol, 1996). Besides, there may be differences in prescription patterns between physicians and in setting culture, which may influence the psychotropic drug use of clients (Huskamp, Horvits-Lennon, Berndt, Normand, & Donohue, 2016; Kishimoto et al., 2013).

False or unrealistic believes and lack of knowledge of effects of psychotropic drugs in professionals working with people with intellectual disabilities may be a risk for incorrect medication use of the people with intellectual disabilities they support. Education of support professionals in benefits and risks of psychotropic drug use may enhance compliance to medication regimes, including discontinuation trajectories.

In the Netherlands, most support professionals receive no or limited education in nursing health care, including pharmaceutical care. Furthermore, support professionals may have false beliefs of effects of psychotropic drugs and therefore may not want to collaborate in reducing inappropriate antipsychotic drug use (De Kuijper et al., 2014). Therefore, we set up a survey to investigate the knowledge and beliefs of psychotropic drug use of support professionals supporting people with intellectual disabilities in the Netherlands.

We hypothesized that professionals with higher education and with a background related to nursing education do have more knowledge and less false believes of the effects of psychotropic drug use in people with intellectual disabilities compared to those with a lower level of education or with an educational background. We also wanted to investigate whether there were relationships between age and years of working experience of support professionals with knowledge and beliefs. Younger staff may be more educated in alternative non-pharmaceutical treatments of challenging behaviours, and older staff may have more experience and more knowledge in psychotropic drug use and in managing the behaviours of their clients. Here, we hypothesized that more years of working experience was related to more knowledge and less false beliefs.

2 | METHODS

2.1 | Participants

A sample of 215 direct support professionals (aged between 18 and 63 years, \(x = 38.7, \ SD = 11.3\)) from 14 different facilities for people with intellectual disabilities was recruited. All professionals gave informed consent to participate in this study. Furthermore, they worked at least for three months with people with intellectual disabilities with a mean of 14.0 years (range: 1–40 years, \(SD = 9.01\) years). Of this sample, 77.2% of professionals support people with ID who use chronically psychotropic drugs for psychosis and/or other mental problems (39.1%) and/or for behavioural problems (28.8%). Table 1 shows the characteristics of the sample.

2.2 | Procedure

The managing board of a random selection of 30 organizations offering residential support to people with intellectual disabilities spread over the Netherlands was requested by phone at first and by e-mail a second time to forward an e-mail to all direct support professionals to participate in this study. Of the 30 organizations, 14 had given informed consent to be willing to recruit these support professionals. These organizations received a link to two online questionnaires; one related to the current knowledge about psychotropic drug use, the second about the expectations of support professionals about the use of antipsychotic drugs. The support professionals were asked to complete the questionnaires in a digital form. Each professional was asked to fill in the questionnaires twice with an interval of two weeks.

2.3 | Instruments

To investigate the current knowledge regarding the effects and side effects of psychotropic drugs of the direct support professionals, a questionnaire was used that was especially designed for the current study "Knowledge of Psychotropic drugs." The questionnaire was based on the mandatory instruction leaflet which should be handed along with the delivery of the medication to consumers or consumers' caregivers, on free available pharmaceutical information of public websites and of own institutions' websites, and on professional guidelines with regard to the monitoring of side effects. An experienced intellectual disability physician and pharmacist agreed on the content and the answers of the questionnaire.

This questionnaire consists of 12 questions concerning indications and side effects of the various psychotropic drug classes. In addition, there were four questions related to the experiences of the professional with antipsychotic drug use of people with intellectual disabilities. The content of the questions was based at a minimum level of
knowledge, which a support professional should have in order to be able to collaborate sufficiently with clinicians in pharmaceutical treatments. To answer the questions correctly, a middle vocational level of education was required. Each question could be answered with “yes,” “no,” or “don’t know.” For the questionnaire, Cronbach’s alfa, as measure for the internal consistency was 0.58. One question regarding side effects of methylphenidate with two options did have negative item rest correlations (respectively −.05 and −.07). Removing this question with negative item rest correlations (van den Brink & Mellenbergh, 1998) resulted in an increase of Cronbach’s alfa from .58 to .62 which indicates a more sufficient internal consistency according to the national standard of the COTAN system for assessments of psychometric qualities of questionnaires and instruments (i.e., 0.6–0.8 for use of questionnaires in groups in contrast with the use of questionnaires in individuals, which require a Cronbach’s alfa of at least .70). The intrarater reliability was analysed by calculating Cohen’s kappa with the data of a total of 25 direct support persons who completed the questionnaire a second time with two weeks in between. Cohen’s kappa was .57 which indicates a “moderate” reliability (Streiner & Norman, 2008). The questionnaire also included a number of questions regarding the reason for use of the antipsychotic drug by the clients with intellectual disabilities of participants and the occurrence of side effects according to the meaning and observation of the participant.

Expectations were investigated with a questionnaire specifically focusing at “expectations of antipsychotic drug use.” The questionnaire “expectations of antipsychotic drugs” was based on a literature search and on interviews with direct support professionals. An experienced intellectual disability physician and researcher in the field agreed on the content of the questionnaire.

On the one hand, the questionnaire addressed well-known and evidence-based effects of antipsychotics on mental illness-related psychiatric and behavioural symptoms, and on the other hand commonly presumed, but not evidence-based effects on challenging behaviours. The questionnaire comprised three sets (consisting of a total of 25 items) of questions covering domains of symptoms, that is “challenging behaviour/mental symptoms” (eight items), “management of behaviours/cognitive functioning” (eight items) and “quality of life” (nine items) (Morisse, Vandemaele, Claes, Claes, & Vandevelde, 2013). Each item of the subscales could be scored on a 5-point scale, ranging from (1) almost not, (2) slightly, (3) moderate, (4) considerably, to (5) to a great extent. Cronbach’s alpha, as measure of the internal consistency for the total scale was .91. For the subscales, Cronbachs’ alfa was .81, .79 and .80 respectively. In addition, there were questions concerning personal characteristics, that is sex, age, education, years of working in the field, and training and education in psychopharmacology during and after their vocational education.

The questionnaire also included a number of questions regarding demographic characteristics, education and working experience of the participant and whether there was need for more education concerning effects of psychotropic drug use.

### 2.4 Statistical analyses

Descriptive statistics were used to analyse professionals’ characteristics and to calculate the scores (mean, SD) of the questionnaires. Regarding the questionnaire about the knowledge, theoretically, one could score maximal 16 points by giving the right answer at the 16 questions. We used a cut-off score of 12.8 points (80% of 16 points, meaning 80% of the questions were correctly answered according to the commonly used national standard) as a minimum of sufficient knowledge.

To analyse the relationships between professionals’ characteristics and scores of the questionnaires, and between (domain) scores of the two different questionnaires Pearson’s correlation coefficients and t
test (regarding dichotomous variables) were computed. As regards the last mentioned questionnaire, however, we excluded questions 7 and 8 in the domain “challenging behaviour/mental symptoms,” because higher scores here indicated realistic expectations in contrast to the other domain questions which measure more or less unrealistic expectations; in the domain “management of behaviour/cognitive functioning,” we excluded questions 11 and 12, because these questions concern comparisons with other treatments in contrast to the other domain questions which cover potential direct effects of antipsychotics; in the domain “quality of life,” we excluded question 17, 18 and 19, because these questions concern potential direct effects of antipsychotic drug use with higher scores indicating negative influence in contrast to the other domain questions which are about the potential benefits.

Because only one participant belonged to the group “lower vocational education” (see Table 1), a t test was executed to analyse the differences in mean score between the two groups regarding education level.

3 | RESULTS

All data were normally distributed.

Table 1 shows the characteristics of the support professionals.

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**FIGURE 1** Knowledge of respondents shown as correct answers to questions of a self-designed questionnaire regarding knowledge of psychotropic drug use in people with intellectual disabilities. Questions: 1 = Psychotropic drugs are agents which are used for the treatment of mental disorders such as psychosis, attention deficit and hyperactivity disorder (ADHD) and mood disorders. These agents are acting on brain function and on behavioural functioning. Psychotropic drugs may be ordered in classes according to their main treatment goal. In this order, how many classes of psychotropic drugs exist? A = 1–3, B=>3, C = don’t know—Correct answer: B. 2 = the most frequently prescribed agents for treatment of challenging behaviours are A = anti-epileptic drugs, B = antipsychotic drugs, C = don’t know—Correct answer: B. 3 = Antidepressants may be prescribed for the treatment of depressive mood disorders. How much time will it generally take to find a positive effect on the mood of patients? A = after three days, B = after some weeks, C = don’t know—Correct answer: B. 4. Antipsychotics may be prescribed for the treatment of psychotic disorders or psychotic symptoms such as delusions, hallucinations and suspiciousness. How much time will it generally take to find a positive effect on the psychotic symptoms of patients? A = 0–2 weeks, B = >2 weeks, C = don’t know—Correct answer: A. 5. Belong sleeping pills to a psychotropic drug category? A = yes, B = no, C = don’t know—Correct answer: A. 6. A correct and registered reason for the prescription of methylphenidate is: A = ADHD, B = hyperactive behaviour, C = don’t know—Correct answer: A. 7. Antipsychotic drugs are proven efficacious for the long-term treatment of challenging behaviours. Is this statement correct? A = yes, B = no, C = don’t know—Correct answer: B. 8. Risperidone is an antidepresant. Is this statement correct? A = yes, B = no, C = don’t know—Correct answer: A. 9. Are the statements below correct? Antipsychotic drugs may cause side effects such as: 9a. Constipation; A = yes, B = no, C = don’t know—Correct answer: A. 9b. Dizziness; A = yes, B = no, C = don’t know—Correct answer: A. 9c. Weight gain; A = yes, B = no, C = don’t know—Correct answer: A. 9d. Urinary problems; A = yes, B = no, C = don’t know—Correct answer: A. 9e. Tremor of hands; A = yes, B = no, C = don’t know—Correct answer: A. 9f. Muscle stiffness; A = yes, B = no, C = don’t know—Correct answer: A. 10. In some cases, physicians may prescribe antipsychotic drugs in people with autism to alleviate symptoms of autism. Is lifelong treatment of these agents warranted? A = yes, B = no, C = don’t know—Correct answer: B. 11. Anti-epileptic drugs are used for the treatment of epileptic seizures. Are they also used for the management of challenging behaviour? A = yes, B = no, C = don’t know—Correct answer: B. 12. Anti-epileptic drugs are used for the treatment of epileptic seizures. Are they also used for the management of challenging behaviour? A = yes, B = no, C = don’t know—Correct answer: B. Question 11 (regarding side effects of methylphenidate) was removed because of the negative item rest correlations.
3.1 | Knowledge of psychotropic drugs

In total, 194 of the 215 participants responded (response rate 90%). The score of the 194 participants ranged from 0 to 15 with a mean score of 8.3 points (SD: 2.8). Figure 1 shows the percentage of the participants who gave the right answer at the 16 questions. The lowest percentage of a correct answer was seen at questions 7 and 9d, the highest at question 2, 9c and 9e.

Of the 194 participants, a minority (n = 11; 5.7%) gave the right answer at more than 80% (cut-off score for sufficient knowledge) of the questions (total score >13 points).

The mean score of the group with “higher professional education or university of adapted sciences” was slightly higher compared to the mean score of the group “senior secondary vocational education” (see Table 2). This difference in mean score was not significant (see Table 2). The mean score of the group who had a nurse educational background was higher compared to the mean score of the group with a social worker educational background; this difference between the two groups was significant (see Table 2). Professionals who supported persons who used antipsychotics had significantly higher scores compared to professionals who had no experience with persons with intellectual disabilities using antipsychotic drugs (see Table 2).

### TABLE 2 Mean scores of knowledge as rated with a self-designed scale (range 0–16) related to the different groups of professionals

<table>
<thead>
<tr>
<th>Score</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>T test</th>
</tr>
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<tbody>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher professional education/university of applied sciences</td>
<td>81</td>
<td>8.5</td>
<td>2.9</td>
<td>t(183) = 0.75, p &gt; .05</td>
</tr>
<tr>
<td>Senior secondary vocational education</td>
<td>104</td>
<td>8.2</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Type of education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social worker educational background</td>
<td>76</td>
<td>7.8</td>
<td>2.9</td>
<td>t(135) = −1.97, p = .05*</td>
</tr>
<tr>
<td>Nurse educational background</td>
<td>61</td>
<td>8.7</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Psychotropic drug use of supported person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>154</td>
<td>8.6</td>
<td>2.7</td>
<td>t(183) = 2.66, p ≤ .05*</td>
</tr>
<tr>
<td>No</td>
<td>31</td>
<td>7.2</td>
<td>2.4</td>
<td></td>
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</table>

*Significant difference.

![Figure 2](image.png)

With regard to the domain scores, there are no correct answers in an absolute sense. Due to the sedative and flattening effects of antipsychotics externalizing behavioural symptoms may be less severe, at least at the short term. However, due to the specific working mechanisms of antipsychotic agents, some symptoms will respond better than other symptoms. Therefore, scores will show a tendency of more or less accuracy, corresponding with more or less likelihood of the effect which may be expected of the antipsychotic drug use. Domain score “expectations of participants with regard to effects of antipsychotic drugs on behavioural/mental symptoms”. Please tick the box which reflects the best your expectations with regard to the use of antipsychotic drugs leading to: 1. decrease in self injurious behaviour. Correct answer: almost none or small. 2. decrease in aggressive/destructive behaviour. Correct answer: almost none, small or average. 3. decrease in self-stimulating behaviour. Correct answer: almost none or small. 4. decrease in acting-out behaviour. Correct answer: almost none, small or average. 5. decrease in hyperactive behaviour. Correct answer: almost none, small or average. 6. decrease in anxiety. Correct answer: small or average. 7. decrease in delusions, hallucinations or suspiciousness. Correct answer: much or to a large extent. 8. decrease in severity of the course of psychotic disorders. Correct answer: much or to a large extent.
3.2 | Expectations towards effects of antipsychotic drugs

Figures 2–4 show the distribution of the scores at the eight questions of the domain “behavioural problems/mental symptoms” (Figure 2), (ease of) “management of behaviour/cognitive functioning” (Figure 3) and “quality of life” (Figure 4). These figures show that the majority of participants do have “average” or “above average” expectations of effects of antipsychotic drugs on a broad spectrum of symptoms in the domain of problem behaviour/mental symptoms and in the domain management of behaviour/cognitive functioning. With regard to the domain “quality of life,” a majority of professionals expected the occurrence of side effects; furthermore, a majority expected a positive effect of antipsychotic drugs on a broad spectrum of features of personal development and well-being of the person with intellectual disability.

There were no significant correlations between scores of expectations at the three different domain scales and age, years of relevant working experience, type of education and “whether or not supporting clients who used antipsychotics”. With regard to educational level, persons with higher professional education had significantly lower expectations towards the effects of antipsychotics on items and symptoms covered by the three different domain scales compared to those with senior secondary and lower vocational education (domain problem behaviour/mental symptoms \( M = 15.5 \) versus \( 17.4, df = 166, t = -2.28, p = .006 \); domain management of behaviour/cognitive functioning \( M = 15.5 \) versus \( 17.1, df = 165, t = -2.40, p = .02 \); domain quality of life \( M = 15.5 \) versus \( 17.1, df = 166, t = -2.40, p = .004 \)).

Table 3 shows the beliefs of support professionals with regard to the reason for use of the antipsychotic drug and the perceptions with regard to the occurrence of side effects in their clients. According to support professionals, their clients used in almost 40% an antipsychotic drug primarily for psychosis and in almost 30% primarily for challenging behaviours.

4 | DISCUSSION

In this study, the knowledge and expectations of effects of psychotropic drug use of support professionals in the field of people with intellectual disabilities were analysed. The main findings are that support professionals have low levels of knowledge of effects of psychotropic drug use in their clients. Only a minority (6%) reached the cut-off score for sufficient knowledge. This knowledge seems to be independent of level of education but dependent of their educational background; professionals with a nursing background have significantly higher mean scores compared to those with an educational (social) background. Moreover, 60% of support professionals indicated that they are in need for education and training in this area. Our results confirm results of other studies in this area, which also revealed that professionals are in need for education in effects of psychopharmaceutical treatments (Aman et al., 1987; Christian et al., 1999; Donley et al., 2011; Singh et al., 1996) and lack knowledge regarding side effects of psychotropic drugs (Fretwell & Felce, 2007).

Furthermore, support professionals have often false believes of effects on behavioural, cognitive and mental functioning, whereby those professionals with lower educational levels have higher expectations with regard to the beneficial effects of antipsychotic drugs on maladaptive behaviour, cognition, self-control and different aspect of

![Figure 3](image-url)
quality of life. However, with the exception of the beneficial effects of antipsychotics on symptoms of psychosis and the risk of occurrence of side effects, most of the expected beneficial effects on behaviour, cognitive function and items related to quality of life are not realistic, given the way of action of antipsychotics. Only in case of a chronic psychotic disorder or acute psychotic episode improvement in mental functioning by use of antipsychotics may be expected. In case of use for maladaptive behaviours in the first instance antipsychotics perception of staff may be that antipsychotics are effective, because of decrease in symptoms of hyperactivity, irritability or aggression caused by the sedative and cognitive and emotional flattening properties of this agents. Also, professionals judged the primary indication for use of antipsychotic drugs of their clients was in almost 40% for treatment of psychosis and in almost 30% for problem behaviour. In a survey of medical records of intellectual disability physicians was found that reasons for prescription of antipsychotics were in 58% for behavioural problems and in 10% for a chronic psychotic disorder (De Kuijper et al., 2010). In another survey of medical records of general practitioners was found that the proportion of people with intellectual disability who are prescribed psychotropic drugs (i.e., 49%) far exceeded the proportion of recorded mental illness (i.e., 21%) and that antipsychotics were often prescribed in the absence of a mental disorder, but with a history of challenging behaviour (Sheehan et al., 2015). Here, setting culture and beliefs of the prescribing physicians will probably play a role, and these factors may also influence the beliefs of direct support professionals (Huskamp et al., 2016; Kishimoto

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Reasons for use of antipsychotics drugs by clients according to the beliefs and the occurrence of side effects according to the perceptions of their support professionals</th>
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</thead>
<tbody>
<tr>
<td>%</td>
<td>Occurrence of side effects</td>
</tr>
<tr>
<td>Psychosis</td>
<td>Sedation, fatigue, less alert</td>
</tr>
<tr>
<td>Problem behaviour</td>
<td>Emotional blunting</td>
</tr>
<tr>
<td>Seizure disorder</td>
<td>Dizziness</td>
</tr>
<tr>
<td>Autism spectrum disorder symptoms</td>
<td>Extrapyramidal symptoms</td>
</tr>
<tr>
<td>Sleep problems</td>
<td>Increase in body weight</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Drooling</td>
</tr>
<tr>
<td></td>
<td>Dry mouth or thirst</td>
</tr>
<tr>
<td></td>
<td>Gastro-intestinal</td>
</tr>
<tr>
<td></td>
<td>Other central nervous system symptoms</td>
</tr>
<tr>
<td></td>
<td>Miscellaneous</td>
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</tbody>
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et al., 2013). With regard to the presence of side effects, professionals indicated symptoms of the central nervous system (sedation, blunting, dizziness) were frequently present; however, they may underestimate extrapyramidal symptoms and metabolic symptoms, as results of other studies have shown much higher prevalence of these side effects (De Kuijper, Mulder, Evenhuis, Visser, & Hoekstra, 2013; De Kuijper, Mulder, Evenhuis, Scholte et al., 2013; Matson & Mahan, 2010).

So, the findings in the present study may suggest that support professionals are insufficiently informed on the reason for prescription, on the mental and behavioural symptoms, and on potential side effects they should observe in their clients and report to the prescribing physician and behavioural scientist.

Our study has some limitations which should be acknowledged. The study may be biased because organizations and support professionals who participated may have more knowledge on psychotropic drug use than those who did not respond to the invitation to participate. However, results show the knowledge of professionals is poor, so we presume this potential bias does not interfere with the study results. Furthermore, there is lack of information regarding additional comments of support professionals, because we did not provide a free text section in the questionnaires.

A multidisciplinary integrative approach is needed in treatment of psychopathology in people with intellectual disability in order to address all underlying causes of mental disorders and challenging behaviours, and to account for comorbid disorders which may influence clients’ behaviour and the course of mental disorders (Došen, 2007). Behavioural scientists, psychologist, psychiatrists, intellectual disability physicians, general practitioners and last but not least support professionals and main caregivers are disciplines involved. Because support professionals are main disciplines in daily health care of their clients, they should have sufficient knowledge of symptoms of mental disorders and effects of psychotropic drug use in order to observe, report and discuss behavioural, physical and mental symptoms of their clients to intellectual disability physicians, psychiatrists and behavioural scientists. Moreover, it may be assumed they will be better able to collaborate in pharmaceutical treatments of their clients.

As Ahmed et al. (2000) found setting characteristics were associated with renewed antipsychotic drug use after successful discontinuation, a limitation of this study may be that we did not investigate setting characteristics. Setting culture and policies, staffing, training and support of professionals and caregivers, and the availability of pharmacists and other health care professionals may substantially contribute to support professionals’ beliefs and attitudes towards management of clients’ challenging behaviours and symptoms of mental disorders, including indications for and effects of psychotropic drug use.

Future studies should focus on the effect of training and education in symptoms of mental ill-health and effects of psychotropic drugs use on collaboration of support professionals in pharmaceutical treatments, including observation and reporting of effects and side effects, and effects of discontinuation.

5 | CONCLUSION

Support professionals in the Netherlands lack knowledge concerning pharmaceutical treatment of psychopathological conditions, and a majority has false beliefs regarding effects of antipsychotics on mental and cognitive functioning. Sixty per cent of professionals indicate they are in need for training and education in this area.

These findings should lead to adjustments of vocational education programmes. Furthermore, care-providing organizations should offer staff training and education in symptoms of psychopathology and effects of psychotropic drug use. Organizations should facilitate conditions which are needed to offer appropriate mental health care.

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CONFLICT OF INTEREST

The authors have no conflict of interests.

REFERENCES


