

## The Challenge of Responsible dispensing: formal education versus professional practice

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The aim of the present study was to evaluate the education of Pharmaceutical Technicians for the activity of responsible dispensing. Based on a questionnaire with open and closed questions, the study sought to characterize the students, identify knowledge and attitudes regarding the Rational Use of Medications while addressing the limits and possibilities of professional and ethical dispensing in practice. In addition, a group dynamics session - focus group - was held as a forum for debate on responsible dispensing. The results showed that students tended to be mature, currently employed and were predominately women. Displaying adequate knowledge on Rational Use of Medications and of the corresponding legislation, the students reported difficulties exercising compatible practice. While the diagnosis pointed to the need for student preparation to enable ethical dispensing, the Focus Group highlighted the possibility for inclusion of a forum for reflection and debate on the ethics of dispensing as part of the Pharmaceutical Technician training.

**Uniterms:** Pharmaceutical technician/professional formation. Pharmaceutical technician/professional practice. Medicines/responsible dispensing. Medicines/rational use. Professional ethics.

O presente trabalho tem como proposta avaliar a formação do Técnico em Farmácia para o exercício da dispensação responsável. A partir de um questionário com perguntas fechadas e abertas, o estudo envolveu a caracterização dos alunos, a identificação de conhecimentos e atitudes em relação ao Uso Racional dos Medicamentos com vistas ao delineamento dos limites e possibilidades do exercício profissional ético na dispensação. Além disso, foi realizada uma dinâmica grupal – grupo focal - com o objetivo de apreciar a constituição de um espaço de reflexão sobre a dispensação responsável. Os resultados evidenciaram um alunato de maior idade, inserido no mercado de trabalho e predominância de mulheres. Dispondo de conhecimento adequado sobre o Uso Racional dos Medicamentos e da legislação correspondente os alunos fazem referência às dificuldades no exercício de uma prática condizente. Se o diagnóstico apontou para a necessidade de ser trabalhada a preparação do aluno para o desempenho ético na dispensação, o Grupo Focal apontou para a possibilidade de inclusão de espaços para reflexão e debate sobre a ética na dispensação no processo de formação do Técnico em Farmácia.

**Unitermos:** Técnico em farmácia/formação profissional. Técnico em farmácia/prática profissional. Medicamentos/dispensação responsável. Medicamentos/uso racional. Ética profissional.

### INTRODUCTION

Pharmaceutical practice was originally associated to empirical experimentation embarked upon as part of the complex path of scientific development. The Jesuits, during the colonization period, were the first to act as pharmacists in the country, bringing medications from

Portugal (Santos, 1999). Later came the apothecary, making handcrafted medications (Zubioli, 1992). With the arrival of the royal family to the country, the first courses of medicine were created in 1832. In 1839, the first school of pharmacy was founded, in Ouro Preto, Minas Gerais (Zubioli, 1992). The pharmacist had in this course, a defined social role: the medication professional, catering to the needs of the community.

In the post war economic reconstruction movement, industrialization increased, intensifying the setting up of pharmaceutical and chemical multinational companies in

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Brazil. Therefore, this expansion in supply of industrialized medications was detrimental to artisanal production (Santos, 1999), suffocating the incipient national technology. Together with mass production, the health medication process expanded (Barros, 1983). Given the commercial valorization of medications, in a context where the number of pharmacy colleges was limited, Pharmacists went on to work in other more promising areas such as clinical analysis and biomedical research. Prioritizing a technological role, Pharmacists withdrew from catering for the community's health and basically ended up with the job of clerks.

In the wake of the Sanitary Reform after the 8<sup>th</sup> National Health Conference, the Pharmacist Mobilization on Pharmacy National Day in 1986 triggered a recuperation of the original professional identity movement, advocating the presence of a pharmacist in all pharmacies. With the institutionalization of SUS (Unified Health System), the pharmacy encompassed part of the primary health service under Pharmaceutical Assistance, acting as an integrating party in the National Medications Program (NMP). As defined in Resolution number 338/2004 (Brasil, Ministry of Health, Conselho Nacional de Saúde, 2004), Pharmaceutical Assistance involves everything related to medications: research and development, production and quality control, updates and standards of protocols in therapy intervention and treatment schemes, distribution, transportation, stocking and disposal, dispensing, pharmaceutical attention, pharmacovigilance, price and the population's access to medication and health education.

The pharmacy functioning as a health Center for the population and dispensing medications responsibly, should promote their rational use while preventing the risks and consequences of self-medication, unnecessary use of medications, and costs that these practices imply.

The fulfillment of these proposals, however, clash with the deviations outlined by the aggressive structure of medication commercialization. The Instituto Brasileiro de Ética Concorrencial (2005), in a study whose results were presented and discussed by authorities of Anvisa, CFF and CRFs, revealed dispensing as a mere act of reselling medications or for tax evasion, with informal work practices, illegal exchange of medications for similar ones of low quality, absence of a pharmaceutical professional in charge, and difficulties inspecting the fast-growing number of establishments. The pharmacy, seen as a commercial establishment, became a concern for the authorities.

This scenario highlights the need for higher standards of medication dispensing, reaffirming the strategic role of professionals who work in this setting.

These new arrangements make evident the Pharmacists new role and similarly, that of the Pharmaceu-

tical Technician. According to the legislation, "...it is the pharmacist's responsibility to supervise dispensing" (Brasil, Ministry of Health, Agência Nacional de Vigilância Sanitária, Resolution number 328/1999), and also "all the technical services of the establishment" (Mato Grosso do Sul, CRF, Legislação, Resolution number 357/2001) that are hierarchically subordinated. Without referring to limitations (legal) of the pharmacist's presence in the establishment, it is worth mentioning the decisive role of the technician, who is often the last, if not the only point of contact with the patient before pharmacotherapy commences. Where health is a right of the population (according to the current Constitution), medication is an instrument of health, and pharmacotherapy one of the most-used resources in treatment, this constitutes a consequent proposal in which the presence of a qualified professional is needed in all processes involved in Pharmaceutical Assistance. It is worth mentioning that the law defines the function of the technician, but the professional is not recognized by the Pharmacy Committee. Without addressing the merits of this situation, the fact is that this mismatch favors the disregarding of the technician and their work in the complex task of dispensing in our milieu.

Highlighting the necessity and importance of training of technicians for dispensing in this profession, together with the pharmacist's role in this reconstruction process, the National Curricular References on Technical level recommendations in the Pharmacy area (Brasil, Ministério da Educação, 1999) are relevant to reinforce ethics in teaching the practice of dispensing. Training must not overlook, besides its focus on contents, the preparation of professionals on an ethical front.

In their literature review on the subject, Wingfield, Bissel and Anderson (2004), found only a few studies referring to ethics in the pharmaceutical practice. Studies were invariably limited to the professions ethics code, each country's legislation, sparse opinions, reflections and letters from some professionals in the area. And finally, this review suggested the need to raise basic knowledge on pharmaceutical ethics, where this knowledge should be systemized and integrated into the larger schemata of health care ethics. It was also suggested that research on "how to best teach and attain ethical competence" is done before the individual starts to practice, as well as on how to develop and update this competence among pharmacists currently practicing. If these observations are valid for the ethical training of pharmacists then they also apply in the education of technicians that are on the front line in attending the population. This shapes the requirements of the socially-oriented professional, especially in the delicate challenging issue of dispensing in our environment.

Against this background, the aim of the present study was the education of Pharmaceutical Technicians for the practice of responsible dispensing. Its main focus involves characterizing the students according to their socio-demographic profile and professional experience in the health area and identifying students' knowledge and attitudes regarding the Rational Use of Medication in the dispensing practice, in a bid to set limits and possibilities in the professional ethics of dispensing. Finally, the value of group dynamic techniques aimed at expanding the forum for debate on responsible dispensing in the technical schools of Pharmacy were assessed, in an effort to contribute to the ethical education of future professionals in the Pharmaceutical Assistance ambit.

## METHODOLOGY

The exploratory survey took a combined quantitative and qualitative approach, involving the application of a questionnaire with open and closed questions, together with the running of a focus group.

While the quantitative approach is guided by the logic of comparability of the objects under observation (where the validations of the collection instrument is assumed in other procedures), the qualitative approach emphasizes the distinct singularities in the sphere of meanings attributed to attitudes, beliefs and values. Considered as the essence and the result of human life, these meanings confer concreteness to social life. Inherent to actions, social structure project the articulation of the subjective plan with the determinants that structure social living, taking account of the complexity and dynamics of concrete and historical social configuration (Haguette, 2003; Minayo, 1992). In identifying the meanings, the shift between the individual and the collective are grounded in interpretation backed by theoretical- methodological references that confer scientific character to the procedures in this kind of investigation. In this way, it is possible to take account of social origins and transformation, while human construction, conferring originality and importance of the qualitative approach in the health area, alongside advances in technical knowledge.

Taking into consideration these factors, the study casuistic included the students on the Pharmaceutical Technician course at SENAC, because this is a traditional school for technicians across many professional areas, including courses in the health area.

The investigation involved students from both branches of the school - Jabaquara and Tiradentes - that were at levels I and II of the course, run during day and night periods, with a view to embracing the diversity of students

at the institution. The survey was applied in September and October 2007, with the participation of 81.6% of the students enrolled: 33 students from level I (66.0%) and 60 students from level II (93.8%). The total number of participants was similar within the branches Tiradentes and Jabaquara.

Without intending to compare students between levels I and II, the rationale behind stratification was for sizing, originally of the characterization of the student and the extent of their knowledge on and attitudes towards dispensing.

Two conditions in this case were relevant in the search of an association of performance by year of course (level I and II). On one hand, the fact that being at the same levels these students were not (all) at the same place in the course, because the beginning of the group is random during the year given the institutional ability to attend demand. Another factor is the fact that the work experiences of the students in the work place transmits formal teachings in reference to dispensing. Under these conditions, the performing of this diagnosis served as a starting point for the structure of the qualitative treatment of the information obtained- that would go on to dispense with the original structure of the levels.

Fulfilling the function of characterizing the population of the study, the questionnaire focused on, in the first part, the socio-demographic variables: age, gender, social extraction, active in the work market (in the health area or otherwise).

The questions in the second and third parts of the questionnaire are designed to ascertain knowledge and attitudes regarding the rational use of medications, based on the definition stated at the National Conference of Health, in Nairobi, 1985. On the basis of this definition, the survey involved questions on the use of medications as indicated only in necessary cases, for the shortest possible time and for the lowest possible cost, as well as on the self-medication issue. In the case of the legislation governing controlled medications, the study undertook to recognize the reasons related to the application of the law, therefore obeying without question, identifications of side effects, dependency and the necessity of a doctor and, prescription of antibiotics. Regarding the guidance given to the medication user at the time of dispensing, questions on dosage, use of other drugs, nutrition and habits (smoking and alcoholic beverages) were considered.

On the subject of attitudes, the students were expected to give their position on problem situations regarding the Rational Use of Medications involving self-prescription and guidance on use. The "Instructor Guide in Good Medical Prescription Practice" by the WHO (2001) has references to the selection of questions addressed in this item.

The fourth part of the questionnaire, composed of open and closed questions, investigated the student's opinions on ethics involved in dispensing and responsible dispensing, looking to justify the slots dedicated to discussion on the subject during the course. Subsequently, the answers to the open questions were considered: problems that interfere with the clerk's responsible practice, solutions to these problems and comments on responsible dispensing.

After transcription of the students' answers, thematic analysis was used prior to the identification of significant lines, reported for the social relations context (Franco, 2005; Minayo, 1992) which they fall under, in this case, drug commercialization in our setting.

In the cases of problems that interfere with the clerks' responsible practice, the following categories were highlighted: commercial view on dispensing involving profit and competitiveness, self-medication and self-prescription, clerks' lack of commitment and ethics, non-fulfillment of the legislation and bad customer service. Concerning, the solutions to the problems encountered in the clerks' practice, the categories regarding payment, inspection, pharmaceutical ethics and responsibility involving pharmacy owners and employees, professional education and population care, were considered. Comments on dispensing were categorized as follows: pharmacy with population health service, quality information for the population, and professionalism.

Addressing the theme of subsidiary teaching on the subject of ethical education for Pharmaceutical Technicians, a focus group was run along the lines established in the literature (Neto *et al.*, 2002; Pereira, 2005).

The group was made up of nine students, four level I and Five level II, eight of whom already worked in the area (hospital pharmacy, prescription pharmacy, health clinics) met at the end of October 2007.

With the objective of ascertaining to what extent commercialization is a limiting condition for responsible dispensing, the meeting developed focusing on the exchange of experiences and identification of the technician in this practice. The direction of the discussion was determined by the following questions: Is responsible dispensing possible in pharmacies? Do you feel the need to discuss ethical issues regarding the pharmaceutical area? Is it worth discussing ethics?

The meeting, conducted by the researcher, was taped and transcribed and content used for analysis and presentation of the results. The significant lines were related to the context of dispensing practice in the market scenario, with analysis supported by the theory on responsible dispensing, as cited earlier.

The project was previously approved by the UNIFESP Ethics Committee. Authorized by Senac, the survey with the students involved the signature of a Free Informed Consent term by all the students who answered the questions, as well as those that participated in the focus group.

## RESULTS AND DISCUSSION

### Student profile

The profile characterization (Table I) indicated that majority of students were in the age range of 18 to 24 years old (63.4%) at both levels. Considering the course as a requisite for insertion or promotion in the job market, the predominance of women called our attention (73.1%) at both levels. This result reflects the entry of women in the job market, which has increased requirement for higher schooling among women, for the same positions as men in the job market (National Research by Home Samples of 1978, 1979, 1983 and 1986, 1989).

As a social extraction indicator, 46.2% of the fathers and 41.9% of the mothers presented incomplete schooling. However, for completed schooling, the mothers surpassed the fathers at 25.8% vs 15.0%. This relationship is found to be inverted starting from high school level.

Showing a distinct trait in the student's profile, the survey evidenced a high proportion of working students. Of these, 38.7% were already working in the health area and 29.0% worked in other areas.

### Knowledge and attitudes

Introducing the item, the students were questioned on self-medication practice- with 90.3% of them reporting that this activity was a commonplace practice, where its identification as a problem was a consensus (97.8%). Focusing on the issue of knowledge on Rational Use of Medications (WHO, 1985), Table II shows that 87.1% of the students had heard about it, where, in total, 75.3% had acquired this information during the course. A significant portion had contact with the subject outside the course (24.6%), which could be attributed to the fact that a large proportion of them already worked in the health area.

These results demonstrate the relationship of independence between the variation in the student's knowledge on dispensing and their classification by level. The influence on the of the students' work experience on the formal knowledge transmitted, in the course was previously outlined in the methods section.

Items listed in connection with the Rational Use of Medications included use only when needed, correct

**TABLE I** – Student profile according to age, gender, parents' schooling and Professional role by level (n, %). Technical Course in Pharmacy, SENAC, 2007

Variables	Level I		Level II		Total	
	n°	%	n°	%	n°	%
Age						
18 to 24 years	18	54.5	41	68.3	59	63.4
25 to 34 years	12	36.4	16	26.7	28	30.1
35 years and older	3	9.1	3	5.0	6	6.5
Gender						
Male	11	33.3	14	23.3	25	26.9
Female	22	66.7	46	76.7	68	73.1
Schooling / father						
No schooling	2	6.1	11	18.3	13	14.0
Elementary I	13	39.4	17	28.3	30	32.2
Elementary II	4	12.1	10	16.7	14	15.0
High school	12	36.4	16	26.7	28	30.1
University	2	6.0	6	10.0	8	8.7
Schooling / mother						
No schooling	6	18.2	8	13.3	14	15.0
Elementary I	8	24.2	17	28.3	25	26.9
Elementary II	10	30.3	14	23.3	24	25.8
High school	8	24.2	17	28.3	25	26.9
University	1	3.0	4	6.7	5	5.4
Working Professional						
Working Professional / yes	21	63.6	42	70.0	63	67.7
Working/ Health Area	14	42.4	22	36.7	36	38.7
Total	33	100.0	60	100.0	93	100.0

**TABLE II** – Knowledge on Rational Use of Medications (n, %), by level. Technical Course in Pharmacy, SENAC, 2007

Questions / Positive answers	Level I		Level II		Total	
	n°	%	n°	%	n°	%
	33	100	60	100	93	100
Have you heard of Rational Use of Medications?	31	93.3	50	83.3	81	87.1
where / during the course?	28	84.8	42	70.0	70	75.3

posology, use for the shortest time possible, consumption of controlled drugs only with a doctor's prescription, self-medication and responsible self-medication and polypharmacy. Overall, responses on these questions were consistently correct. In this case, slightly higher performance was noted in level II.

When tackling the problem situation of indication or otherwise of an antibiotic previously used by the patient because of reoccurrence of a sore throat, the majority of

students (93.9% level I and 86.7% level II) were against this indication, showing an attitude compatible with the current legislation (Resolution number 328/1999 and Resolution number 357/2001) - it is the pharmacist's responsibility for indicating medications only for drugs that do not require a doctor's prescription.

Regarding the acquisition of controlled medications, 71.0% of the students (84.9% level I and 63.4% level II) adequately identified the four consecutive items from re-

commendations - mandatory by law, demand due to side effects and dependency, caused by these medications, and a doctor follow up during treatment.

Also in the evaluation of attitudes section, the students were presented with a situation involving orienting an elderly patient on the use of many medications for a variety of pathologies. Orientation regarding time period, doses, drug interaction, nutrition, with questioning on the use of plant therapy, smoking and alcoholic beverages, were considered. Results showed that 67.7% of the students correctly identified the items regarding patient orientation (68.7% level I and 66.7% level II), presenting a compatible attitude with the Rational Use of Medications on the issue of orientation to a medication user.

Following the questions on attitudes regarding medication dispensing, three situations were given to the students referring to orientation of patients with complaints of sore throat. The data obtained showed a consistent congruence with the legislation (Resolution number 357/2001) by a significant proportion of the students regarding orientation reported for the case problems. Data on the variables displayed a tendency toward better performance in terms of attitude among the students from level I.

The first situation involved a patient with the complaint of a sore throat after taking antibiotics prescribed by the doctor. This was considered as correct, if the patient had followed the prescription correctly, to orient the patient to return to the doctor, while not increasing the dose of the antibiotic or changing it for a stronger one- 93.5% of the students answered correctly, with equal proportions for both levels.

The second problem situation entailed a patient with the complaint of a severe sore throat, without any other symptoms, who was requesting medication. It was considered correct not to indicate antibiotics, resorting to the use of an anti-inflammatory and/or, referring the patient to a doctor- 89.2% of the total students reported adequate orientation. This percentage was lower in level II with 85.0% of correct answers versus 97.0% in level I.

The third situation involved the case of a patient, also complaining of a sore throat, to which was added the presence of chronic diarrhea for which the patient was taking loperamide. In this case, the correct answer was not indicating an antibiotic, instead advising intake of liquids, since loperamide dries the throat, and/or referring the patient to a doctor. The percentage correct answers was 93.5% for students overall, revealing a difference between levels (100% in level I and 90.0% in level II).

Complementing the question of patient orientation in the dispensing process, students were asked to report on the reason for the patients' chronic diarrhea in the third problem situation. The level of willingness to investigate the possible causes for the patient's problem was of 50.5% overall, being 45.5% in level I and 53.3% in level II.

There was no consensus as far as the willingness to inquire on the reason for the patient's chronic diarrhea. Some would do so in order to optimize guidance, whereas others would not do so because they deemed it an "intrusion" that went beyond the call of their technical duty. These circumstances give rise to an area of ambivalence, taking into consideration the recommendations of providing primary attention.

### Ethics in dispensing

Regarding responsible dispensing, there was a consensus among the students in relation to ethics in pharmacies. Table III illustrates that, of the total students, 94.6% recognized the existence of ethical problems in pharmacy, where 97.8% of these reported that the issue was discussed during the course. Opinion also reached consensus regarding the noncompliance with the law where only 19.3% considered that the law had to be followed.

Amid the conflict of interests that exists in pharmacies between professional customer service and ethics, and the company's financial goals, ethical practices are overlooked. According to Garrafa (2003), regarding the legislative aspect of the health area, this had evolved a lot more than our collective practice, being far from the

**TABLE III** – Information on pharmacy ethical issues (n, %), by level. Technical Course in Pharmacy, SENAC, 2007

Questions / Positive answers	Level I		Level II		Total	
	n°	%	n°	%	n°	%
	33	100	60	100	93	100
Are there ethical problems in the pharmacy?	31	93.9	57	95.0	88	94.6
Was ethics discussed during the course?	33	100.0	58	96.7	91	97.8
Is the legislation followed?	3	9.1	15	25.0	18	19.3

progress proportioned by the law. After a Brazilian civil society movement, our Constitution became one of the most advanced in the world on medical-sanitary issues. The biggest difficulty continues to be in the practical implementation of these laws achieved.

Taking into consideration the conflicting situation faced by the clerk that attends the pharmacy's population, this study sought to identify the students' universe regarding the ethical conditions of pharmacist practice for the purpose of the role in the primary care ambit. The answers given for the following issues "List three problems that interfere with the clerks' responsible dispensing", "List three ways forward for the dispensing solution" and "Comment on responsible dispensing", provided a clearer picture of the ethical issues that involve the clerks' performance in the pharmacy from the student's perspective.

With regard to the categorization of the students' answers, the reports related to problems that interfere with clerks' responsible dispensing were considered first. In one of the categories used, the commercial vision of dispensing, profit and competitiveness was expressed in the perspective of working:

- "only with the objective of selling"
- "concerned with the profit"
- [to make] "commissions"
- [under] "pressure to sell more"

In a complementary manner to this perspective, the "patient pressure for an indication of medication" was mentioned, pointing to the highly prevalent issue of self-medication and self-prescription.

"Lack of ethics" and "opportunism", answers classified under the lack of commitment and clerks ethics category, were frequent..

On the non fulfillment of the legislation, the students registered the following as problems that occur in dispensing:

- "change for a similar"
- "sale without prescription"
- "sale of controlled drugs without prescription"
- "lack of a responsible technician to help the clerk"

Along with these factors, the Students also registered issues related to:

- "disregard with the client's problem"
- "lack of attention and incorrect dispensing"
- "bad service to the client"

Moving the focus to the ways of solving problems faced by clerks practice, five different classifications were identified:

- In the payment ambit, it was proposed to "raise salaries to avoid commissions";
- In another alternative, the need to implement "strict and effective inspection" was mentioned, as was also "forbidding commission";
- On the matter of responsibility and pharmaceutical ethics involving companies and pharmacy employees, the students reported "boss and employee awareness" and "working with ethics and respect";
- The importance of professional was evidenced in the expressions used on the need for "improvement, upgrading", "take a course that brings knowledge" and "quest for improving skills";
- Regarding the population care service, "talk to the patient, know to listen, know their needs, resolve their doubts, orient them", "treat the patient with respect and professionalism", was also a line of action reaffirmed among students.

Regarding the comments on responsible dispensing, three types of consideration were basically taken into account.

The discussions highlighted the need to turn pharmacies into health service points. The comment "the pharmacy should be a public health service clinic" was significant, where this appeared opposite comments stating that the "pharmacy isn't just simple a business".

In a second aspect considered, the need for availability of quality information to the public was reaffirmed, in other words, "orientate on-self medication, disease prevention", as well as establishing "commercial and marketing control".

Completing these three aspects, the references were on the professionalism issue. In this sense, "responsibility, being aware", "being ethical" were cited, and "dispensing involves people's health" stood out.

Comparing the uniqueness of individual responses evidenced the nuances that make up the problem in question in the social ambit. Thus, the students' observations handle the complexity which is involved in responsible dispensing in our milieu, showing the broad potential; spectrum for professional education.

According to the courses guideline in the health area, the graduates profile assumes the capacity of a role in the variety of levels in health care and in the disease-health process, discussed in ethical principles. Therefore, the creation of a forum for discussion gains relevance in pharmaceutical technician training, taking into conside-

ration the ethical problems related to the actual conditions of professional practice, giving them tools to deal with issues that are faced daily by pharmacy clerks. According to Resnik, Ranelli and Resnik (2000), professional education should be conducted in a manner that makes it clear to the students the paces at which current technological development occurs, and the social and economic transformation that influences pharmaceutical practice, so they see the importance and the real public health service impact. As Kanny and Kyler (1999) affirmed, schools should pay attention to the ethical issues that affect the profession, going beyond the technical or purely instrumental dimension, , attaining a sound understanding of the social and citizenship responsibility involved in their function.

Assuming that it is the courses' responsibility for the development of skills related to social responsibility of the pharmaceutical technician professional practice in medication dispensing, it is valuable to observe a group dynamic exercise. Involving the comparison of different individual perspectives in the open situation of a discussion forum with the social reality in which they participate, quoting Moscovici (1978), the dialectical relationship between the individual and the group is fulfilled. This was the case in the following report on the focus group session held.

### The focus group

The focus group was set up to promote discussions related to professional practice in pharmacies drawing on students' experience in the public service or otherwise. Based on dynamics techniques, the intention was to observe the ideas and concepts raised, mainly centered on the reaffirmed impracticality of applying the legislation in practice, and examining the possibility of a shift in attitude regarding responsible dispensing.

The debate was triggered by the questions outlined earlier: "Is responsible dispensing possible in pharmacies? Do you feel the need to discuss ethical issues related to the pharmaceutical area? Is ethical discussion worth it?" From these questions followed a negative categorical from the student's representing an interesting movement of reworking of attitudes during the course of the group dynamic session.

*"NO!!! Nothing will help!!!" (S)*

*"Brazilians don't care about the legislation because it doesn't work. Professional ethics are too 'lax'; many that work in pharmacies have no ethics, sell more medications and recommend... they fuel self medication, making the patient buy the wrong medications" (F)*

Addressing the commercial profit issue, the students report the impossibility of ethical practice. The impracticability of responsible dispensing is associated here to the economic factor, regarding the establishment's owner's power that demands the meeting of sales quotas and also the need for employees to keep their jobs.

*"Certainly ethics should be above everything, but it is too complicated to force the owners and trained employees to sell while exercising concern with the users. What matters is selling... I don't believe that in Brazil this will change one day, because here there is a lack of honesty and common sense! (A)*

As a logical complement of commercial activities and medical assistance shortcomings in meeting the population's health needs, the students pointed to the pressure from the medication users, associated to self-medication:

*"They confuse pharmacies with supermarkets!" (T)*

*"People really do not want any information, they already arrive with the idea of what they want, even when they ask for the pharmacists/clerks help..." (T)*

Making a link with the mass medication use, the reference to advertising was significant for being a vehicle of user manipulation:

*"There are commercials all over the media, they should be forbidden" (A)*

*[Commercials] "lead people to use medications inadequately" (S)*

*"The big laboratories want to make more than they deserve...they want to continue selling a lot" (F)*

With regard to pharmacist absence, whom is always responsible for the pharmacy's performance- "*the pharmacist is not always present*" (AP) - the students reaffirm that the legislation does not work.

Not considering professional ethics as the object of the discussion, the students naturalize the impossibility of responsible dispensing. Considering their responsibilities on an external level, the students acknowledge the legislation, but point to the lack of inspection, a situation which the government is responsible for, illustrated in the following quote:

*“Know the legislation we do, but it is a good apple in the middle of rotten ones! Laws exist, but without the capacity of inspection extending to all of the establishments, it loses meaning...” (C)*

*“Sanitary vigilance should be more severe, too much goes on without punishment. Those who try to work within the law are seen badly in the work environment!” (C)*

Redirecting the discussion, the students recognize the problems confronted in the issue, going back to the need for specific training for clerks. For the first time, the group refers to professional education with the clerk’s responsibility.

*“The population doesn’t know the medication efficacy or the mechanism of action. Medications are serious, we shouldn’t be taking whatever we think... a technical course is essential for those working in a pharmacy, because in the course there are important classes for them to become a good professional” (T)*

*“Clerks don’t have training and they get complacent in the job, causing a bigger problem....it is necessary to take the course.” (AP)*

*“The sale of medications should be done by a professional (or at least it should be), because we deal with people’s health and lives. The medications may heal as well as harm the organism. Most of the pharmacies “salespeople” are not qualified to practice the profession...” (A)*

Based on these considerations, showing the difficulty present in the current practice, the comments go back to a few previous arguments regarding demands of product placement in the market that surpass the “rational sale” possibilities.

*“There’s also the problem of products that have a bonus sale, motivating “push therapy”, where the professional thinks more about money than patient’s health, because they make commission on sales of that product!” (S)*

*“If the person gets used to working that way, making commission and with goals to reach, they won’t change; won’t work as a team, pushing even antibiotics! I had a colleague that owned a pharmacy, had a lot of money, but did a lot of cheating... people work by making a lot of tradeoffs; for a example: pays for 25 boxes of next day birth control, but really receives 100 from the manufacture; then the clerk receives*

*commission to sell; the marketing people give gifts to the clerk that sells 10 boxes of a certain product, or take the clerks to clubs, and the manager approves all of it; the small pharmacy owner is a businessman, he doesn’t exercise responsibility” (A)*

In a critical position, the issue of the health professional’s responsibility on medication dispensing goes beyond legislation, and inspection comes up, starting a shift in stance regarding the act of dispensing:

*“All of the medications must be controlled, not only by law and inspection, but also by the professional in the area, demanding more responsibility from the pharmacists” (C)*

The group, under these conditions evolved in re-assessing their role as pharmaceutical technicians in the medication dispensing process:

*“But, guys, we are taking care of people’s health! It’s related to the rational use of medication. The buy should be rational and the sale too!!!” (AP)*

*“Awareness is needed” (R)*

*“I “take care” of people” (C)*

In this context the important issue on professional education emerges again. The group participants call attention to their own professional interests in search of education.

*“We are here in search of.....” (C)*

*“Us that are graduating should make the difference.” (C)*

*“Investments should be made towards professional education and ethics”. (F)*

*“Sales of medications must be done by professionals, because we are dealing with people’s health and lives.” (A)*

Funneling in on the ethical issue, the group evolved to the consideration that:

*“The ethical discussion must be part of the technician’s education”. (R)*

*“Discussion is always welcomed, because new ideas may come up, new ways to act and correct flaws...” (C)*

*“Maybe, even if everyone tells about their day to day problems, reflect on the subject... and start changing, even if just a little.” (F)*

Without running through all of the lines it became clear that group dynamics enhanced the reflection process on ethical issues regarding dispensing, in the sense of identifying each others' responsibility regarding the act of responsible dispensing, giving rise to changes in stance related to ethics.

According to Neto, Moreira and Sucena (2002), the focus group technique's main characteristic lies in the fact that it works with expressed reflection through the participant's words. It's not about a merely descriptive or exposed line; it's "debate words", receiving interference from others. According to Pereira (2005) focus groups rely on people's experience, on their day to day and social life. The technique allows the manifestation of private aspects in reality, the everyday way of life with the social forces that act on people; the pressures they suffer, the context in which it is embedded and most of all, changes that occur in society.

According to Oliveira (1999), – on experiences with adult teaching – the learning process should challenge the student to question, to look for solutions to a certain subject, forcing them to take a stand in defense of their ideas, instead of there being passive content reception. These factors relative to teaching may be applied in a positive manner in the ethical education field. With the students active participation, the debate that takes place in a focal group opens up new meanings of fragmented content, as the group dynamic puts the issues up for discussion. It is in this sense that the product of this didactic approach, indicates the possibility of seeing the inclusion of enriched, in a complementary manner, ethical teaching in the education of Pharmaceutical Technicians.

## CONCLUSION

The students of SENACs Pharmaceutical Technician course, classes of 2007 at Jabaquara and Tiradentes branches, are predominantly mature, women with the majority present holding jobs at the time of the collection of this information.

The students, independently of the level of the course, had adequate knowledge on the Rational Use of Medications and were in agreement on the legal rulings that now place pharmacy in the primary health ambit.

On the ethical issue regarding dispensing, the study made clear an original fatal posture by students on the difficulties applying ethical dispensing in the pharmacy's routine practice, taking into account on the one hand, the commercial interest underlying medication dispensing,

associated to the population's self-medication habit and, on the other hand, the absence of a responsible pharmacist and insufficient inspection. In this context, absence of the technician's role in the pharmacy ambit of social responsibility was frequent within the students, accentuating the exteriorization of the dispensing responsibilities.

The focus group involved a change in stance in the acknowledgement of the role to be performed by the pharmaceutical technician in the dispensing process. The group dynamic resource as a forum for reflection on the social responsibility issue implied in the act of dispensing medications was confirmed. Taking a bigger view on the issues that emerged from group collaboration, the importance of creating conditions in teaching capable of helping to develop the attitudes in the conflicting situation of real social relations was clear. Through the exchange experience in the group dynamic session, the students distinguished the role of professional training in the ethical foundation of future pharmaceutical technician attitudes as a substratum for dealing with the complex factors that influence dispensing while building the foundation for the pharmaceutical role in the primary health attention.

Given the pharmacist is formally responsible in relation to dispensing, recognition of the technician's strategic role in effective practice in our setting evidences the relevance of concern over the ethical education of these professionals. Therefore, the focus group proved a technique that adds to the student's preparation for practice, building a product to be developed as a didactic source involving student's active participation in the teaching-learning ambit.

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