

# Study of Medical Students' Attitudes towards Physician-Assisted Suicide in Mauritius

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## Abstract

Within the context of the debate over "the right to die", some basic notions need to be clarified to discuss the acceptability of physician assisted suicide (PAS). Currently, PAS is not legal in Mauritius. The aim of this study was to assess the medical student attitudes towards PAS and compare the results of surveys among second, third, fourth and fifth year students. The study was conducted on 266 medical students at SSR Medical College, Mauritius by means of an anonymous questionnaire that comprised of 13 questions concerning personal perceptions, knowledge, attitudes and factors influencing decision making about PAS. Majority of students were in favour of PAS. The 'patient's prospects for improvement' was considered as most important factor for decision making regarding PAS. Approximately half of the students became in favour of PAS over the course of medical school. This change in behaviour was mainly noted in the senior medical students that perhaps because of clinical exposure.

## Key Words

Physician-assisted suicide, Attitudes, Medical Students, Ethics, Euthanasia.

## Introduction

Physician-Assisted Suicide (PAS) means the voluntary termination of one's own life by administration of a lethal substance with the direct or indirect assistance of a physician, making last days of the patients as comfortable as possible [1]. It occurs when a physician provides either equipment or medication, or

informs the patient of the most efficacious use of already available means, for the purpose of assisting the patient to end his or her own life [2]. Now a days, the issues on PAS have become very vital world wide due to recent legalizations on PAS and its current practice in the Netherlands in April 2002 and in Belgium in May 2002. Earlier, Oregon was the first American state to legalize PAS.

Physician-Assisted Suicide is a highly debated issue and continues to generate significant controversy. Many studies [3-20] have been conducted to examine the attitudes and experiences of health care professionals and medical students towards PAS and euthanasia around the globe. Some studies have been attempted to observe changing attitudes towards PAS in medical students as per duration of clinical training [5, 16]. Survey of medical students is instructive because it is likely that identities and attitudes as physicians are influenced by early experiences[21]. In most of the countries including Mauritius, aiding in a suicide is a crime, while suicide or attempting suicide is not illegal. This study has been conducted to understand the attitudes and opinions of second, third, fourth and fifth year medical students regarding PAS and to compare the results of our survey with other published studies.

## Methodology

A cross-sectional survey was administered to 266 medical students of multicultural background at SSR Medical College, Mauritius to explore their attitudes towards PAS. Attitudes were assessed by giving 13-item questionnaire [5] (Table 1) to students at the beginning of a lecture and collected at the end of session. Attitudes were measured by using a four point Likert scale (Strongly Agree-1, Agree-

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2, Disagree- 3 and Strongly Agree- 4). The definition of PAS was provided at the top of each survey format. The students were instructed to give their free opinion anonymously, preserving confidentiality. Participation of students was optional. This survey was conducted in May 2007.

The results of the survey were tabulated and analyzed statistically. A P-value less than 0.05 was considered as statistically significant. Comparisons were also made on the basis of age and sex. A one-way ANOVA was carried out to determine whether there was any significant difference in the response pattern among the students of different years. Independent T-test was carried out to determine gender difference.

### Results

**Demographic profile:** The study was conducted to a total of 266 students (51% male and 49% female): 70 second year students, 90 third year students, 48 fourth year students and 58 fifth year students. Majority of students were less than 24 years of age (97%). The response rate was hundred percent. (Table 2)

**Factors Influencing Decision Making About PAS:** The students were assessed on the bases of 8 factors influencing decision making regarding PAS. Participant considered most the factors surveyed to be important. 'Patient's prospect for improvement' was considered as most important factor followed by 'Patients' understanding of management option' and 'Obtaining more than one medical opinion'. (Table 3)

A one-way ANOVA was carried out to determine whether there was any significant difference in the response pattern among the classes (i.e. students of different years). The results are summarized in the table 4. It can be noted that difference in responses arises for two questions namely: age of patient ( $P= 0.05$ ) and patients' understanding of medical management options ( $P < 0.001$ ). A post-hoc multiple comparison test reveals the following:

a. **Age of patient:** There was a significant difference between 2<sup>nd</sup> year and 4<sup>th</sup> year students.

b. **Patients' understanding of medical**

**management options:** A significant difference was observed between 2<sup>nd</sup> and 4<sup>th</sup> year students and 2<sup>nd</sup> and 5<sup>th</sup> year students but no difference between 4<sup>th</sup> and 5<sup>th</sup> year students. (Figure 1)

c. **Option in favor of PAS:** Significant difference between 2<sup>nd</sup> and 4<sup>th</sup> year students.

**Attitudes towards PAS:** Approximately 60% students entered medical college with a clearly defined opinion on PAS. As a doctor, 54.5% students were willing to participate in PAS ( $P = n.s.$ ) and as a patient, 68.5% respondents had opted PAS to be an option ( $P < 0.01$ ). The opinions of most students (41%) towards PAS did not change over the course of medical school. About 48% students (126 out of 266) became in favour of PAS. (Figure 2)

Most of students (51%) welcomed the legislation of PAS and 33% students felt neutral about it. Only 16% students were in opposition to the legislation of PAS. (Figure 3)

**Discussion:** This study was designed to understand medical students' views towards PAS and explore differences related to gender and year of study. Medline search revealed that there has been significant increase in published literature and public interest regarding PAS related issues during last 10 years. Majority of the students entered medical school with a clearly defined opinion on PAS. About two third students would want PAS to be an option as a patient, but unwilling to participate in the process as physician. Approximately half of the students became in favour of PAS over the course of medical school. This change in behavior was mainly noted in the senior medical students that perhaps because of much clinical exposure. It shows the concept of PAS acceptability is directly proportional to an individual's amount of clinical experience. The students considered almost all factors examined in the survey to be important in making decision regarding PAS. 'Patient's prospect for improvement' was considered as a most important factor. A significant difference was observed for the factor 'patients understanding of medical management options' between 2<sup>nd</sup> year and senior medical students. T-test carried out on all 13 questions revealed no significant difference ( $P > 0.05$ ) in opinion between male

and female students.

The findings of the present study support prior researches [3,4,5] showing that majority of students support the legalization of PAS. The studies conducted on medical students by **Adchalingam et al [6] and Warner et al [21]** showed medical students' opposition for PAS legalization. Limitations of this study are potential response bias and observational nature of the study. Despite of its limitations, the study provides significant results into the medical students' attitudes at different years of study periods and factors which help them in decision making regarding PAS. Although the results found in this study coincide with other similar studies, further studies are required to assess the attitudes of other medical professional especially nurses who had everyday contact and experiences with these terminally ill patients.

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## Table 1: Survey Protocol<sup>5</sup>

### Study of Medical Student Attitudes towards Physician-Assisted Suicide

**Physician-Assisted Suicide** means the voluntary termination of one's own life by administration of a lethal substance with the direct or indirect assistance of a physician, making last days of the patients as comfortable as possible.

Age:.....

Sex:.....

For the following statements (1-3), kindly encircle your agreement level of each:

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. I entered the medical college with clearly defined opinion on physician assisted suicide.	1	2	3	4
2. As a doctor, I would be willing to aid in physician assisted suicide.	1	2	3	4
3. As a patient, I would want physician assisted suicide to be one of my options.	1	2	3	4

For the following statements (4-11) concerning decisions about physician assisted suicide, indicate your level of agreement of each:

	Strongly Agree	Agree	Disagree	Strongly Disagree
4. The age of the patient is important.	1	2	3	4
5. The persistence of the patient's request is important.	1	2	3	4
6. Obtaining more than one medical opinion is important.	1	2	3	4
7. A clear understanding by the patient of medical management options is important.	1	2	3	4
8. The patient's prospects for improvement are important.	1	2	3	4
9. Obeying the law is important.	1	2	3	4
10. Respecting patient autonomy is important.	1	2	3	4
11. Alleviating suffering is important.	1	2	3	4

Kindly complete each of the following by encircling the one phrase that best represents your opinion:

12. Over the course of medical college, I have:
- a. Become much more in favor of physician assisted suicide.
  - b. Become somewhat more in favor of physician assisted suicide.
  - c. Not changed my opinion towards physician assisted suicide.
  - d. Become somewhat more opposed to physician assisted suicide.
  - e. Become much more opposed to physician assisted suicide.
13. If physician assisted suicide was legalized I would:
- a. Strongly welcome the legislation.
  - b. Welcome the legislation.
  - c. Have neutral feeling towards the legislation.
  - d. Be opposed to the legislation.
  - e. Be strongly opposed to the legislation.

Thank you for your participation.

**Table 2: Demographics of the students surveyed**

	2 <sup>nd</sup> Year Students	3 <sup>rd</sup> Year Students	4 <sup>th</sup> Year Students	5 <sup>th</sup> Year Students	Total
<b>Number</b>	70	90	48	58	266
<b>Male</b>	47 (67%)	34 (38%)	17 (35%)	37 (64%)	135 (51%)
<b>Female</b>	23 (33%)	56 (62%)	31 (65%)	21 (36%)	131 (49%)
<b>Age 19-21 yrs</b>	69 (99%)	77 (86%)	26 (54%)	2 (3%)	174 (65%)
<b>Age 22-24 yrs</b>	1 (1%)	13 (14%)	21 (44%)	50 (86%)	85 (32%)
<b>Age 25-27 yrs</b>	-	-	-	4 (7%)	4 (2%)
<b>Age 28+</b>	-	-	1 (2%)	2 (3%)	3 (1%)

**Table 3: Factors influencing Decision Making about PAS**

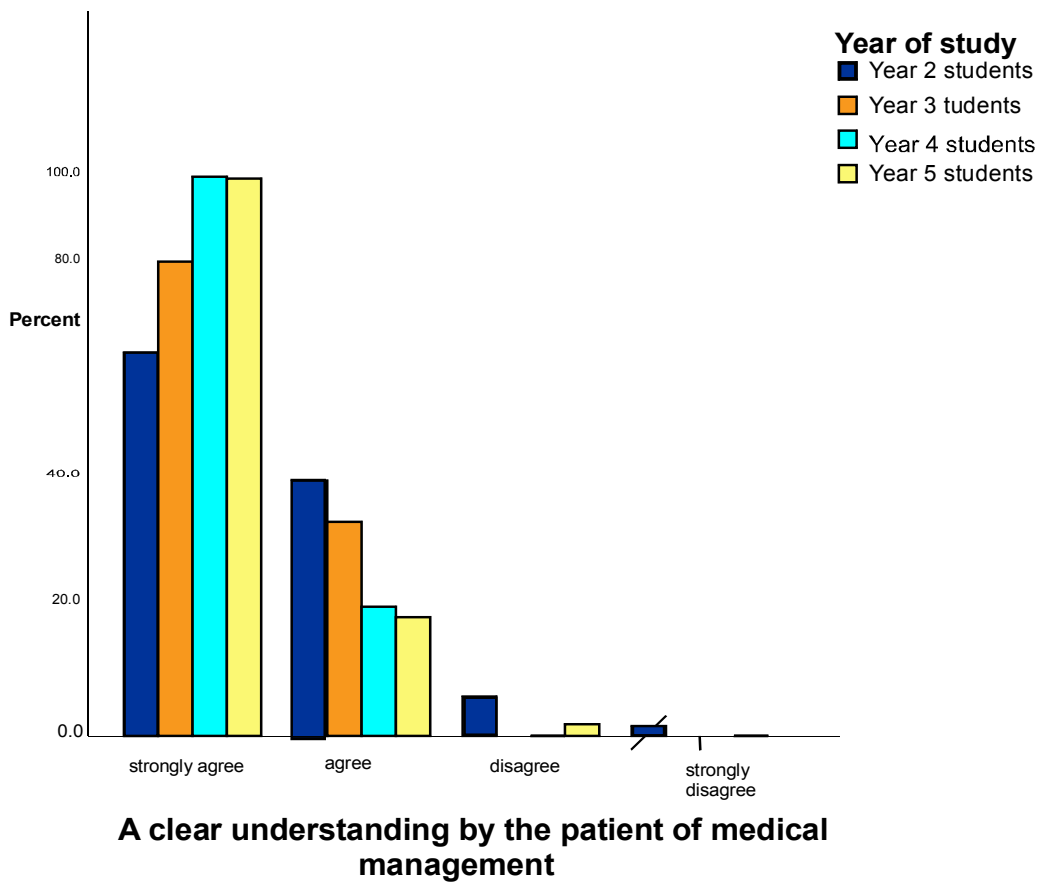
Factors	Students considering factor to be important					P-value (all)
	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	All	
<b>1. Age of patient</b>	54 (77.1%)	77 (85.6%)	43 (89.6%)	51 (87.9%)	225 (84.6%)	<0.001
<b>2. Persistence of patient's request</b>	63 (90.0%)	75 (83.3%)	39 (81.3%)	46 (79.3%)	223 (83.8%)	<0.001
<b>3. Obtaining more than one medical opinion</b>	69 (98.6%)	86 (95.6%)	46 (95.8%)	57 (98.3%)	258 (97.0%)	<0.001
<b>4. Patients' understanding of management options</b>	65 (92.9%)	90 (100%)	48 (100%)	57 (98.3%)	260 (97.7%)	<0.001
<b>5. Patient's prospect for improvement</b>	68 (97.1%)	90 (100%)	48 (100%)	56 (96.6%)	262 (98.5%)	<0.001
<b>6. Obeying the law</b>	66 (94.3%)	82 (91.1%)	46 (95.8%)	57 (98.3%)	251 (94.4%)	<0.001
<b>7. Respecting patient's autonomy</b>	69 (98.6%)	81 (90.0%)	46 (95.8%)	53 (91.4%)	249 (93.6%)	<0.001
<b>8. Alleviating suffering</b>	68 (97.1%)	84 (93.3%)	44 (91.7%)	57 (98.3%)	253 (95.1%)	<0.001

Note: For the analysis of the factors below, results of “strongly agree” and “agree” have been merged as those “considering factor to be important”.

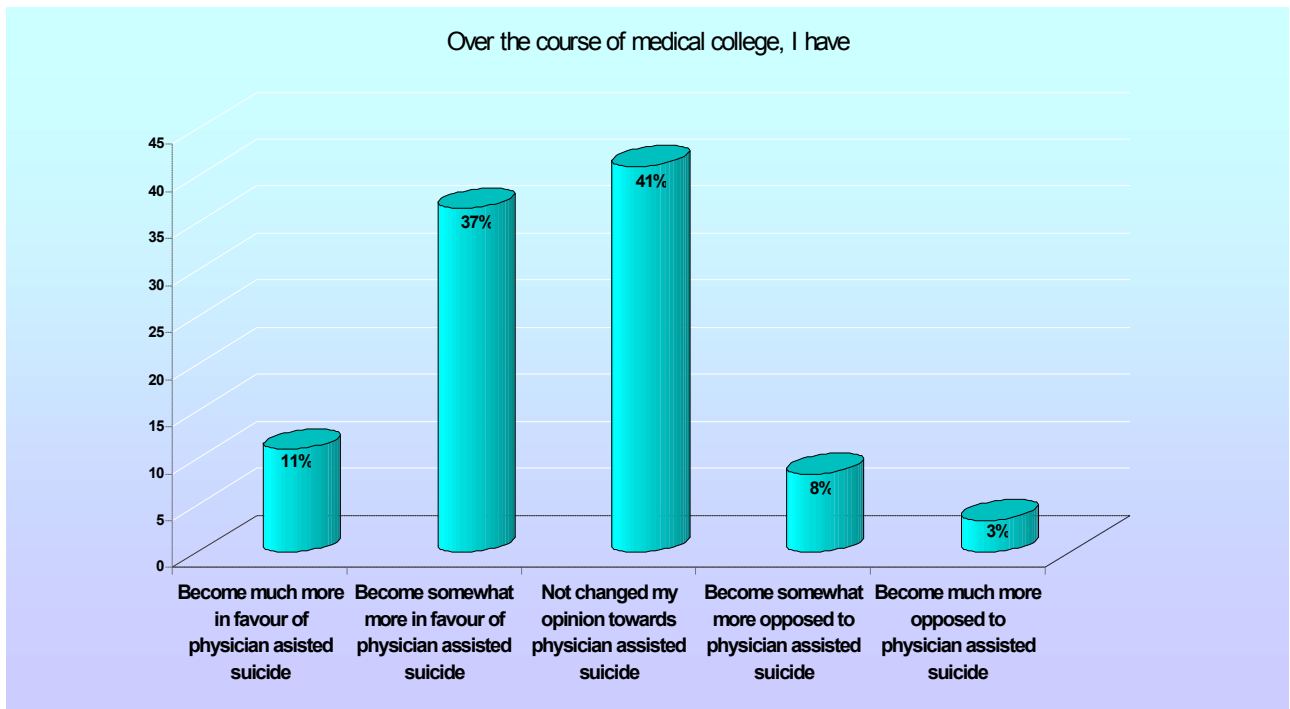
**Table 4: Statistical Analysis by ANOVA**

Factors	df	F	Sig.
1. Age of patient	(3, 262)	2.601	.053*
2. Persistence of patient's request	„	.477	.699
3. Obtaining more than one medical opinion	“	.508	.677
4. Patients' understanding of medical management options	“	5.818	.001***
5. Patient's prospect for improvement	“	1.670	.174
6. Obeying the law	“	1.703	.167
7. Respecting patient's autonomy	“	.823	.482
8. Alleviating suffering	“	.540	.655
9. Option in favor of PAS	“	2.989	0.032*
10. Legalization of PAS	“	0.278	0.841

**Figure 1: Difference in response to the factor- Patients' understanding by the patient of medical management options**



**Figure 2: Opinion towards PAS**



**Figure 3: Attitudes towards Legislation**

