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# Women in Medical Physics, professional problems and the reasons: Indian perspective

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#### Introduction

A discussion on the topic of "Women Medical Physicists" is a paradigm, as the related subject was invented by a great lady.

The very profession of Medical Physics exists due to the great woman scientist of all time, the double Nobel laureate Madame Curie

Despite the fact that there are a number of great Women Medical Physicists, it's a fact that the percentage of women in this profession is small.



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#### **International Scenerio**

First international study on number of female medical physicists globally was performed by International Organization for Medical Physics (IOMP), in 2013

#### **Highlights**

- ► 66 countries participated in the survey
- ➤ Total Female Medical Physicists = 28%
- ➤ USA.....highest number of Medical Physicists in the world but lower percentage of women, compared with other developed countries.
- > European countries... far away from the target (40% female) set by EC.
- ➤ Middle East and Asia.... female Medical Physicists comparable to males

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#### **International Scenerio....contd.**

Australia/New Zealand study published in 2016

- ▶ Rise in the number of Women Medical Physicists.
- The rising number was attributed to women both deserving & passionate in their chosen fields & most important being awareness in the field of Medical Physics.

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#### **Indian Scenerio**

- ► India....In medical physicist community only 33 % are women
- Total number of Medical Physics students every year from all the institutions is approximately around **140**
- ➤ Over the years there have been very few representations of Women Physicists in the Executive Committee (EC) or the Board of Trustees (BOT) of AMPI and CMPI

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	Year	Executive Committee	Board of Trustee	CMPI Board	PRAGE 20
	2005-2007	*1	-		
	2007 - 2009				
	2009 – 2011	*2		*1	
	2011-2013		1		
	2013 – 2015	1	1		
	2015 - 2017		1	1	
1	* Office	Bearers			

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#### First Indian women Physicist

- ➤ The first lady Medical Physicist Ms K.S. Sharada
- The second Ms Reshambala H.H.

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### Aims and Objectives of the survey

This survey was designed to access the current status of women medical physicist(WMP) in Indian medical physics community, more specifically:

- The professional status of Female MP in India
- The barriers or difficulties faced by WMP in India
- Their perspective about the main reasons behind these problems.

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### Design of the survey

- ◆ 281 WMP were included in the survey
- ◆ 248 WMP had completed the survey
- Out of this 248 women, 203 WMP are the member of Association of Medical Physicists of India (AMPI) and rest 45 are not member of AMPI yet

#### WMP survey 2018

- Q. Are you happy with your professional development? a.Yes b. No
- Q. Have you faced any sort of gender biasing in your professional carrier?

  a.Yes

  b. No
- Q. If yes, what could be the main reasons behind this biasing?
  Answer.
- Q. What Could be the possible solutions? Answer.

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#### **Key Observations**

◆ Maximum of WMP agree that they have faced gender biasing in some or other stage of their professional life.

#### **◆** Major problems faced by them are:

- 1 Lack of employment opportunities, in comparison to male MPs
- 2 Discrimination, when it comes to higher position or responsibilities.
- 3 Lack of cooperation from administration side and male colleagues during maternity period.

#### **◆** According to them major reasons were following:

 Rigid opinion of male senior colleagues about WMP capabilities to fulfill long hours of working and late night work demanding professional commitments out of rigid cultural mindset.

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#### **Key Observations**

- 2. Another main reason found was unwillingness of Hospital administration to give maternity leaves or child care leaves to young WMP so they generally deny jobs to young WMP of marriageable age.
- 3. The most interesting observation of this survey was that 12% of them feel that sometimes the attitude of senior WMP's is also responsible for such rigid mindset of male Medical physicist and hospital administration as they ask for some special considerations being women.

...... but it was found that this opinion was debatable as many think that everyone either male or female needs special considerations due to personal responsibilities.

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4. Family duties are considered to be more important than developing careers.

5.It is not always easy being a woman and a professional, as they have to balance between the family life and professional duties



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#### **Conclusion**

So, there is an urgent need to address women issues in India.

- ◆ Need to increase the participation of WMP into various community activities to increase the recognition of WMPs in their respective medical physics community.
- ◆ Encourage them to join communities with some roles
- ◆ Increase the self confidence and the competence level because they have more challenges to face in comparison to their male colleagues.

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