The main goal of ISHKS was to create joint replacement registry which will help our surgeons and indirectly our patients through its critical analysis. The primary goal of any joint registry is to give a warning sign of any implant failure at the early stage which will reduce the burden of revision and catastrophic complications. The another goal of registry is to provide feedback to participating surgeons regarding behavior and revision rate of any implants which will substantially help the surgeon in his clinical practice. To achieve this type of goal registry must capture more than 90% of the data.

Outcome of Registry:

We present exclusive peer review of data collected from 01 January 2006 till 31st December 2017. The ISHKS is able to convince many Arthroplasty surgeons to start participating in to the registry. Registry has been successful in this endeavor as 2016 there were 140 participating surgeons and today it has been 261. This hype has shown us that we need to build this registry aggressively. The total knee replacement documented today are 170598 and hip replacement are 14568.

Total Knee Arthroplasty

From a total pooled dataset of a little more than 1,70,000 TKAs to date, it is encouraging to note that more filled ISHKS registry forms were received in 2017. Having said that, because of almost a two fold increase in the number of surgeons sending in their data (261 in 2017 compared to 141 in 2016), the numbers of TKAs done in 2017 appear to be less than those in 2016. This data is still being updated and may reconfirm that the number of patients undergoing TKA is increasing year-on-year. The prime indication for TKA continues to be osteoarthritis (in 98% of our patients), with reducing incidence of RA and post-traumatic arthritis.

Average age of the patient undergoing TKA (2006 to 2017) is 67 years (males) and 63 years old (females), with females outnumbering males by 3:1 (74% to 26%). With age approaching 70 however, TKAs are being done equally between the two sexes (possibly indicating that males are as prone to needing TKA as females after this age).

Alarmingly, an increasing number of obese and morbidly obese patients are undergoing TKA (BMI>40 as well as BMI>50), signally an ominously changing Indian population demographic towards higher BMI. Our pilot study with the NorthGate confirms that our patient BMI is matching UK registry having slight variations.

Of TKA implants used, a higher percentage of patients are given the PS design (compared to the CR design), and the metal-backed tibial baseplate, with the all-poly component showing a gradual reduction in numbers. Another new finding this year is that more surgeons do not resurface the patella (54% to 46%), and in those resurfacing, 3/4th of them have used the PFC DePuy implants.

Incidence of revision TKA is on the rise, and an alarming 30% of these are for infection and remaining aseptic are loosening. The registry do not have the mechanism of identifying these patients and hence it will be difficult at this moment to give any conclusive evidence of revision rate or a specific implant which is failing. The ISHKS efforts will continue to get adequate data with identification of patients which will help us to give surgeon feedback regarding revision.

Total Hip Arthroplasty

A total of a little over 14,000 THAs have been reported to the registry to date, with males outnumbering females by 3:2 (60% to 40%). The average Indian patient undergoing THA is 50 years (male) and 55 years (female). Like in the knee, once the patient crosses the age of 70, THA appears to be done equally between the two sexes. Indications for primary THA continue to be AVN (47%), RA (9.5%), fracture neck femur (6.5%) and ankylosing spondylitis (6%) in order of frequency.

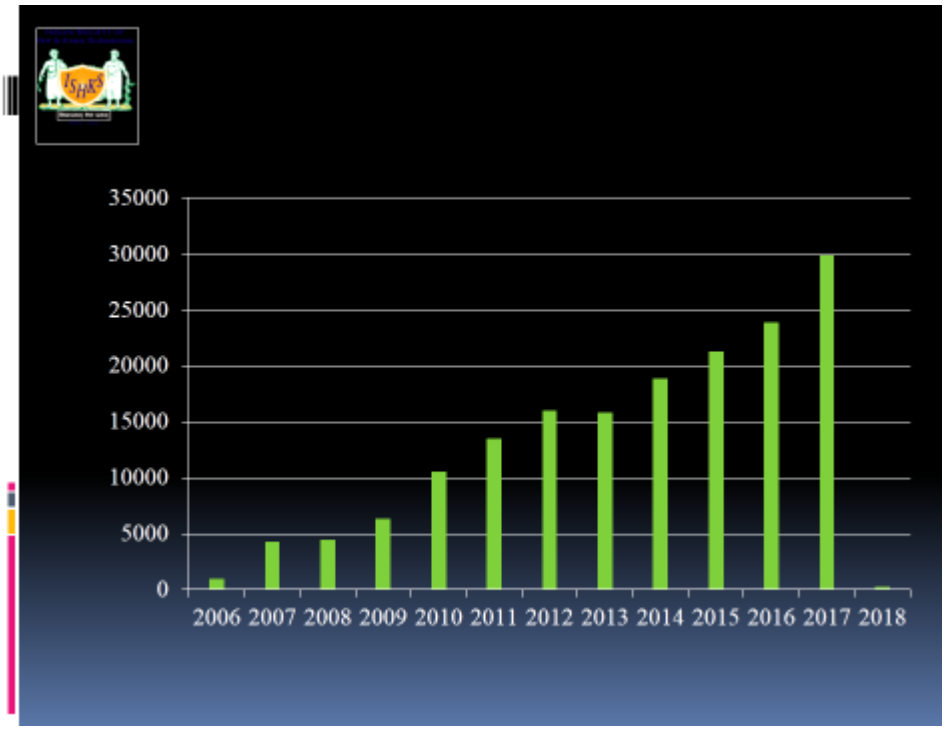
The BMI of our THA patient still averages 26, though the number of obese and morbidly obese patients is slowly rising (similar alarming demographic trend mentioned earlier). Of THA implants used, an increasing use of cementless implants (both cups and stems), 36mm heads, ceramics and ceramicized metals, and dual mobility cups over the past 5 years is being done by our reporting surgeons, mirroring Western trends. This trend possibly needs sustained surveillance.

Numbers of revision THA has gradually increased year-on-year. Unlike TKAs, the reason for revision is primarily aseptic loosening (69%), infection 17% and recurrent dislocation 12%.

The ISHKS Trustees meet either one or twice a year depending on the need and have always have unanimous decision after open discussion. Their efforts are always to improve the function of this association and also improve the registry status. Trust has put lot of efforts at multiple occasion to bring the industry who will take the responsibility to improve collection of registry data and support registry. At Delhi meeting April 2017, all industry partners came on single platform to discuss and have a collobration between them how they can support the registry. Mr Rohit sathe from J & J was made coordinator between al industries. Unfortunately due to osme unforcible reasons the industry is unable to support financialy the registry.

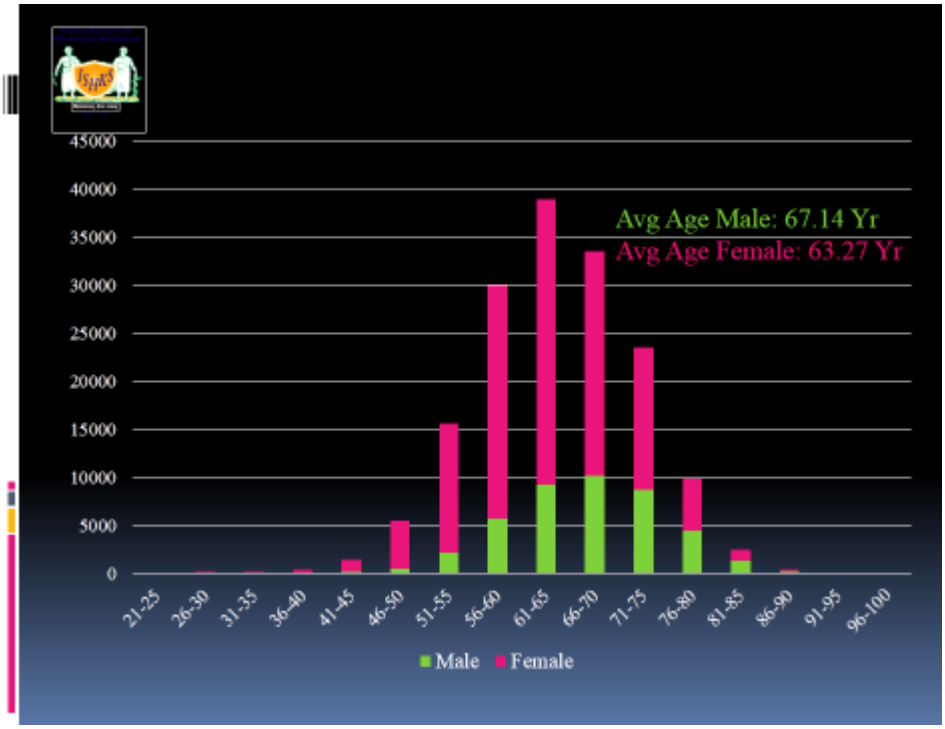
The board of trustees and executive board like to thank Dr Deepak Ajmera, Mr Sanjay Parmar and Ms Priyanka Parmar from the registry staff for their continuous efforts in maintaining the registry data Without their contribution we would not be able to produce registry analysis and give feedback to participating surgeons.

There outcome is as follows:

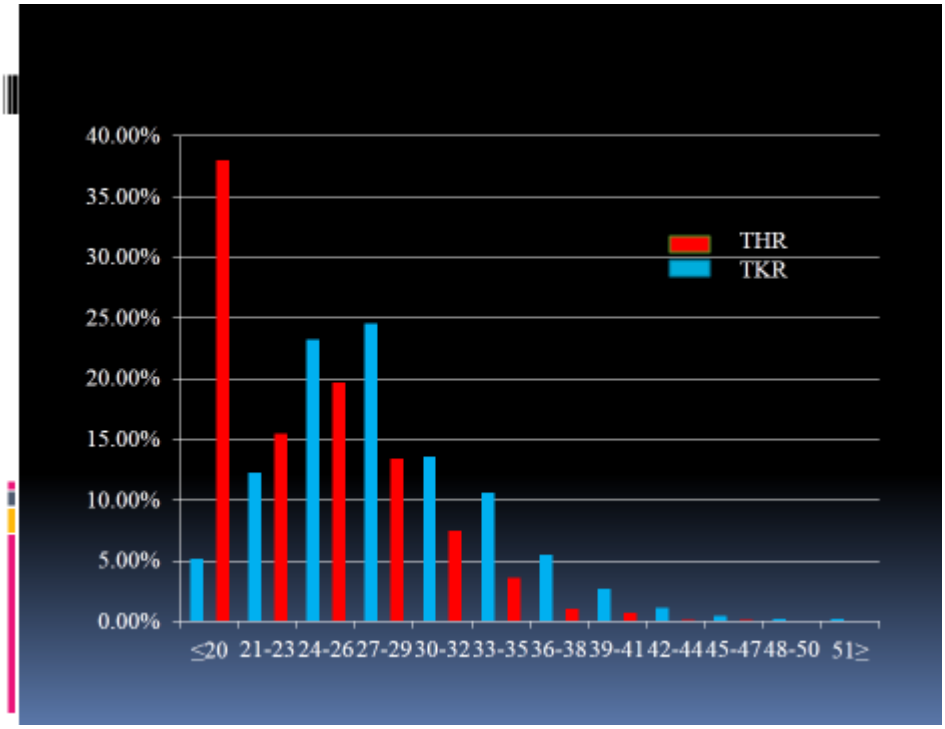


Number of Forms received year wise

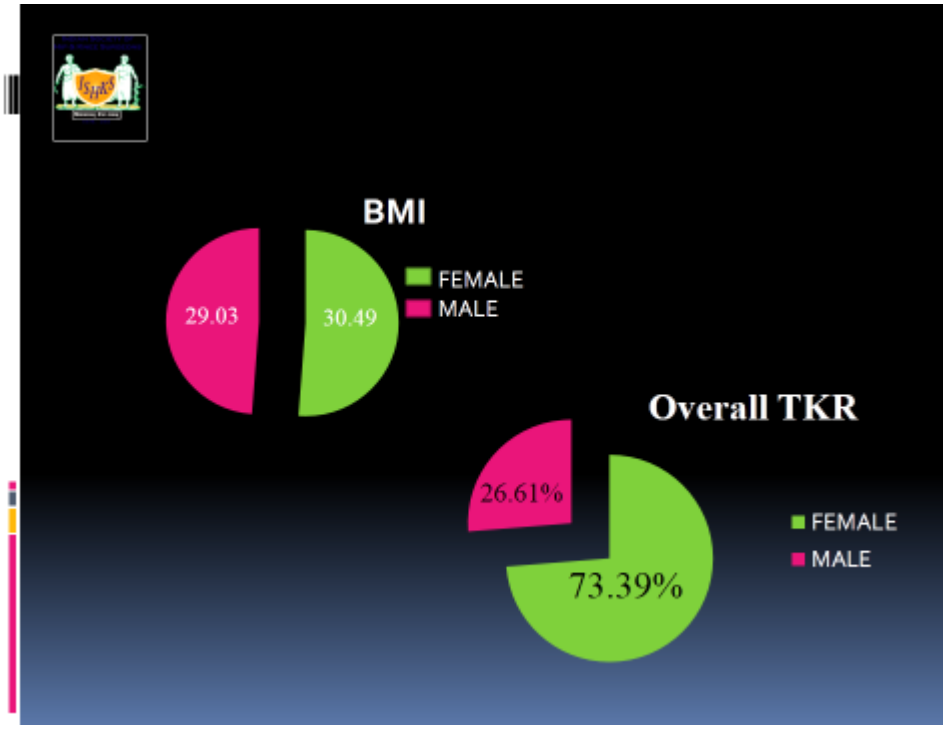
Contributing Surgeons



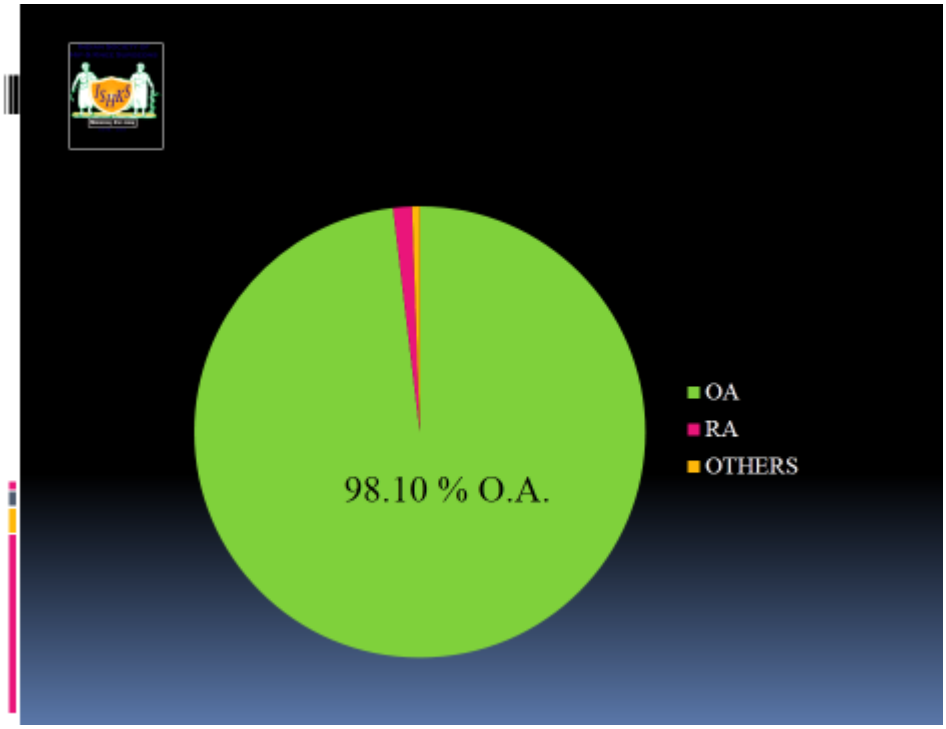
Age Distribution: Male vs Female (TKA)



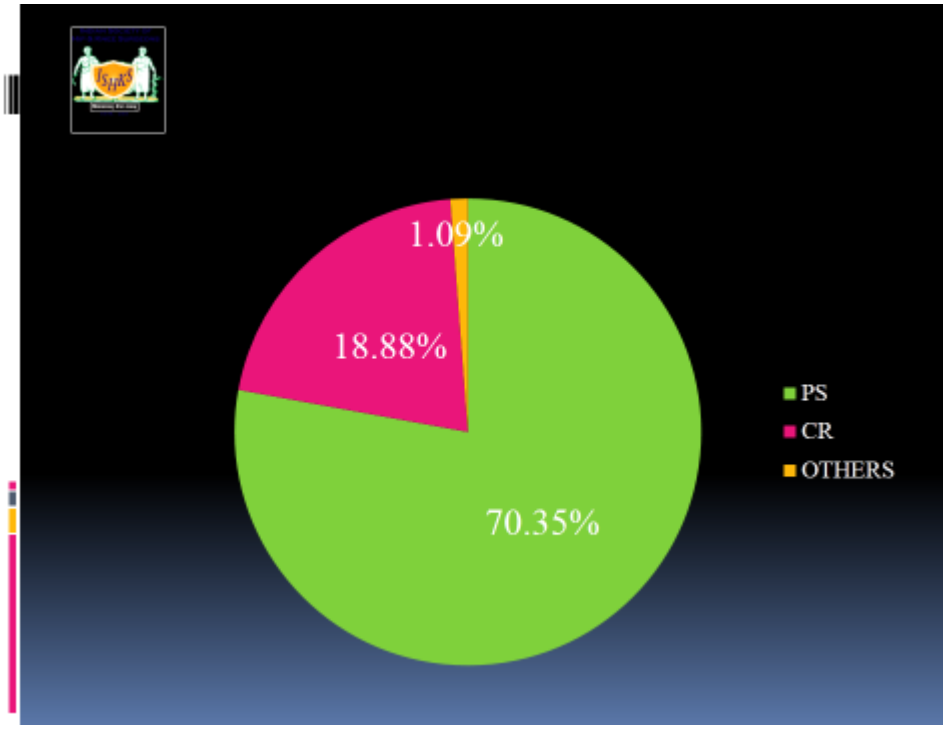
BMI comparison in TKA & THA



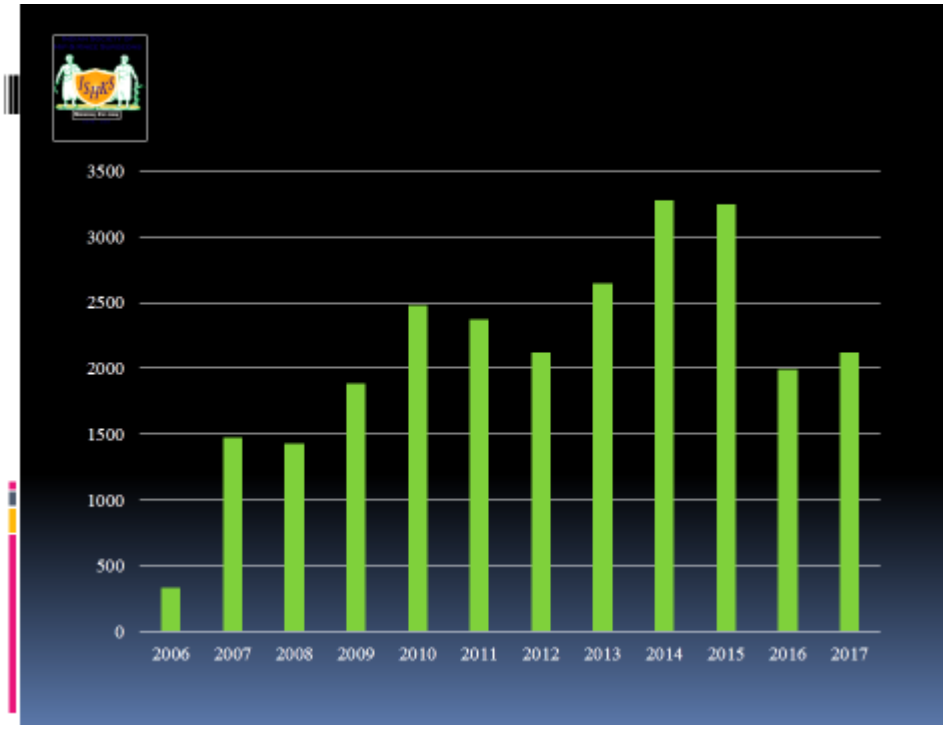
BMI & Sex distribution



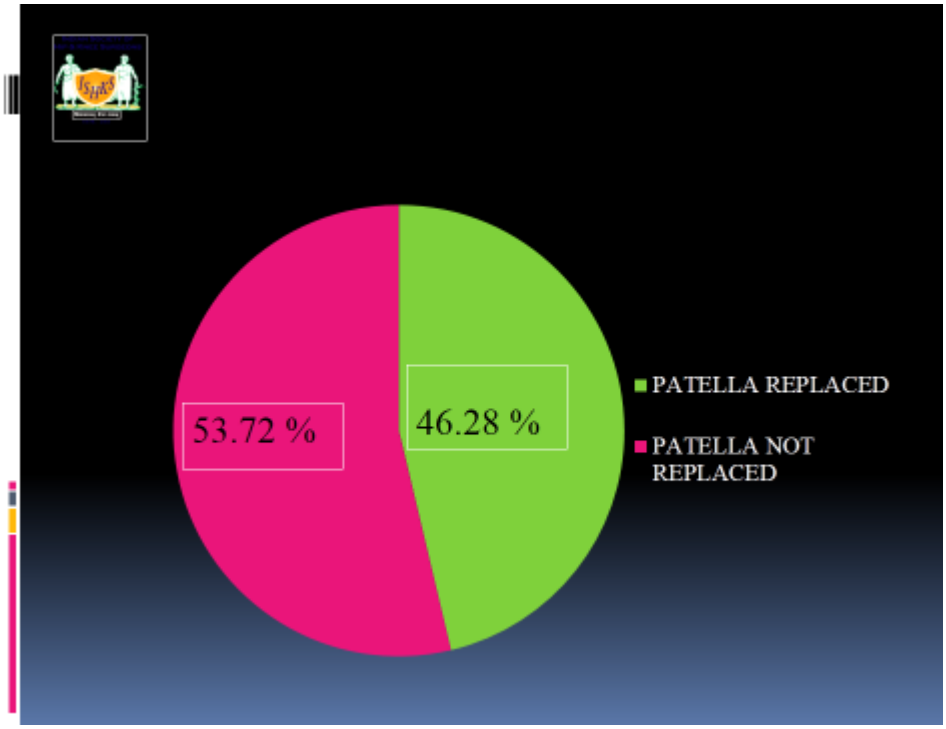
Diagnosis TKA



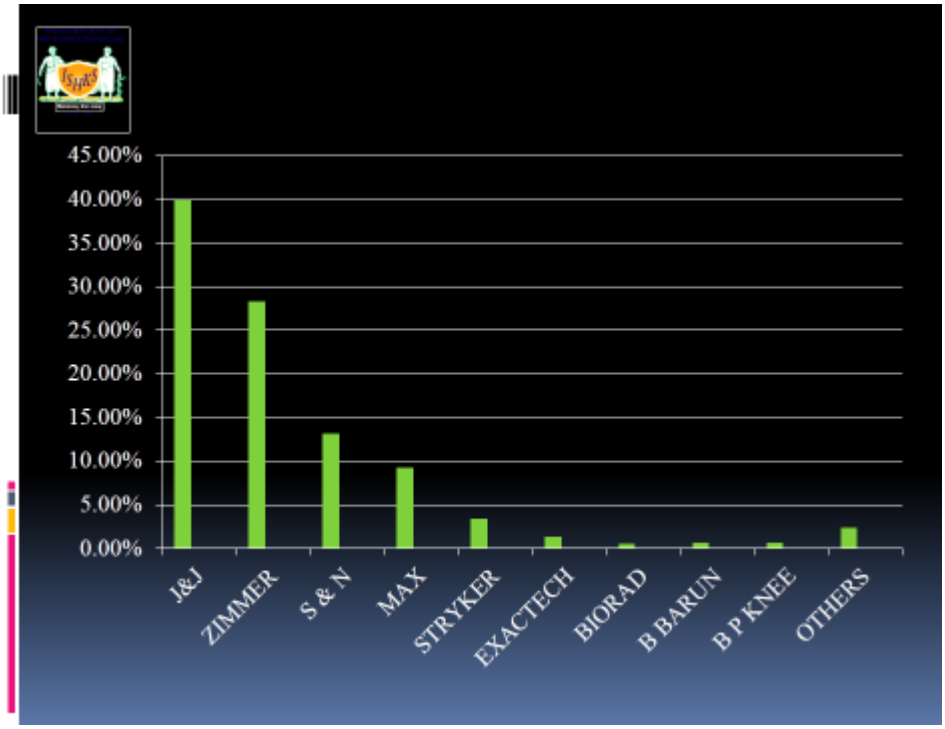
Implant Type



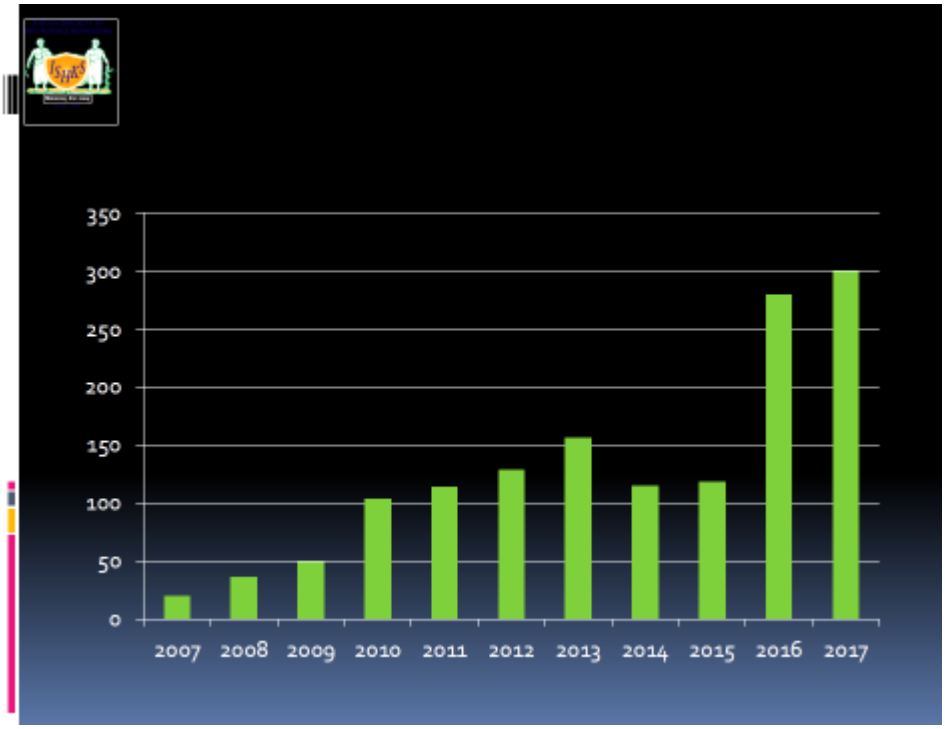
All Poly Year Wise



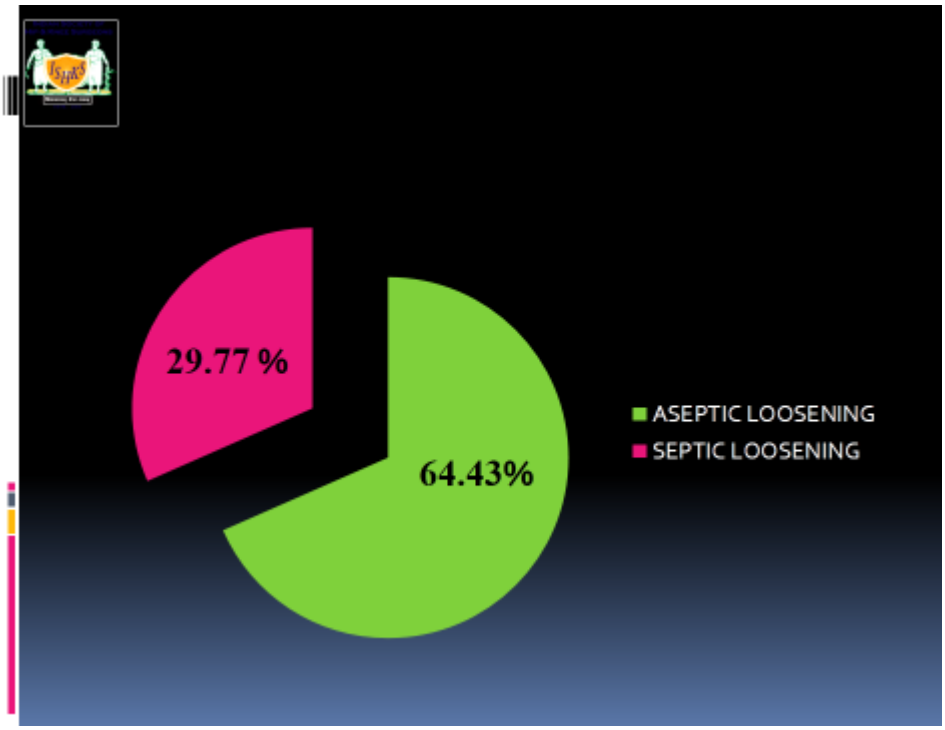
Patella Replacement



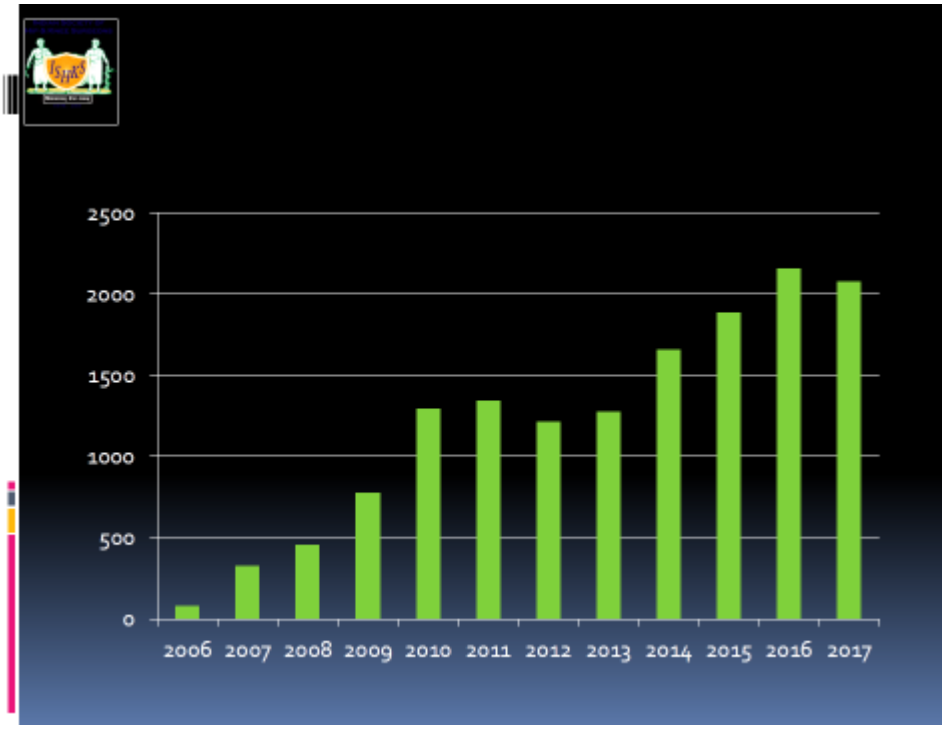
Market penetration TKA



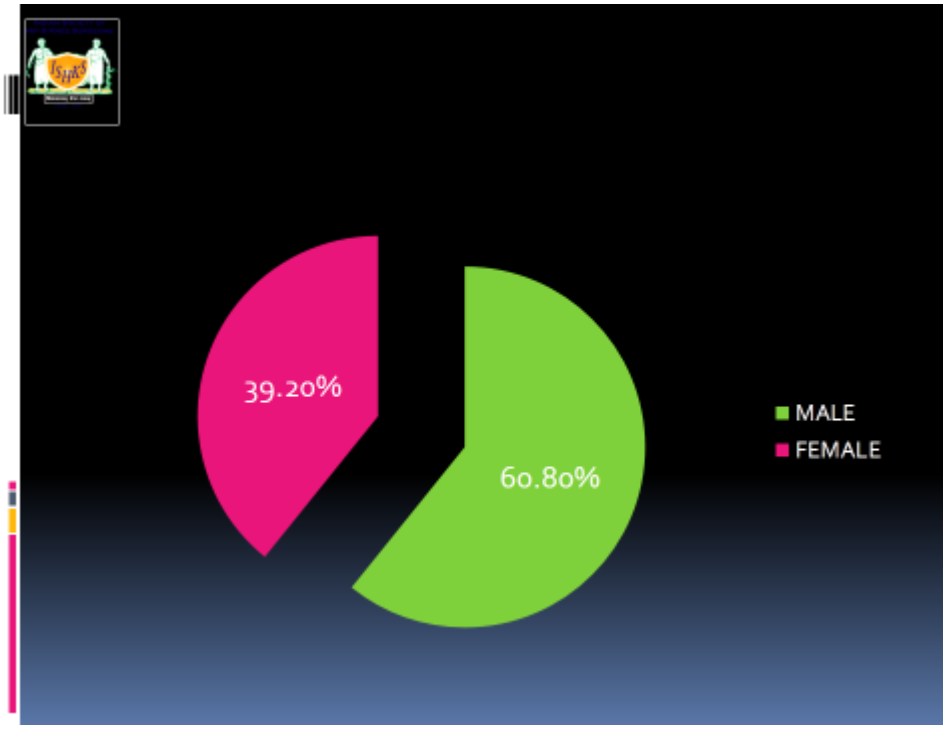
Revision TKA



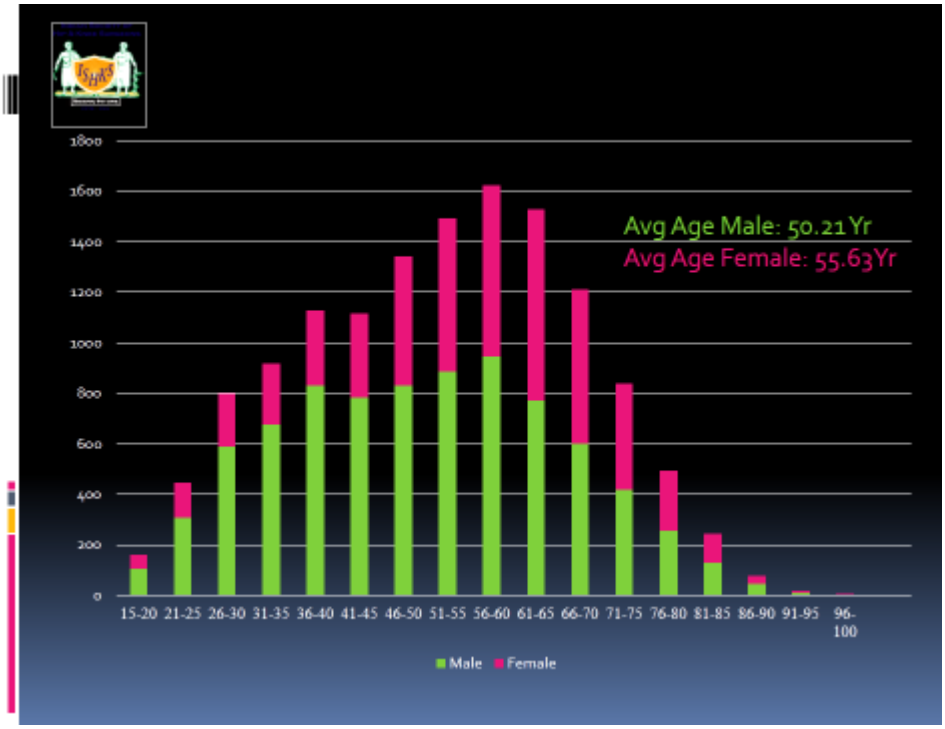
Revision TKA: Cause



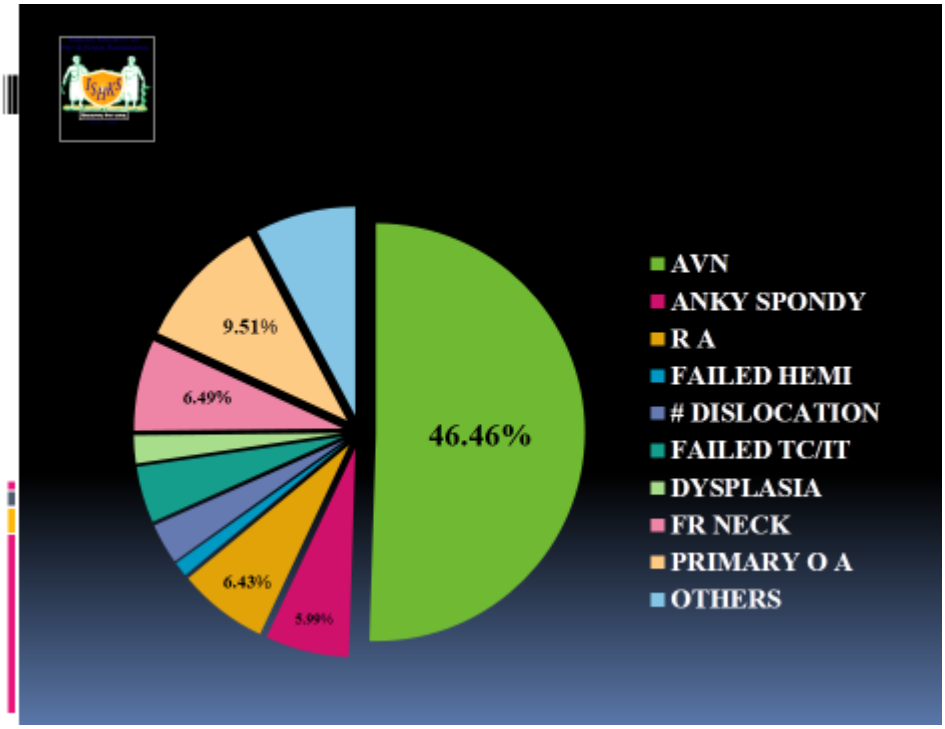
THA Year Wise



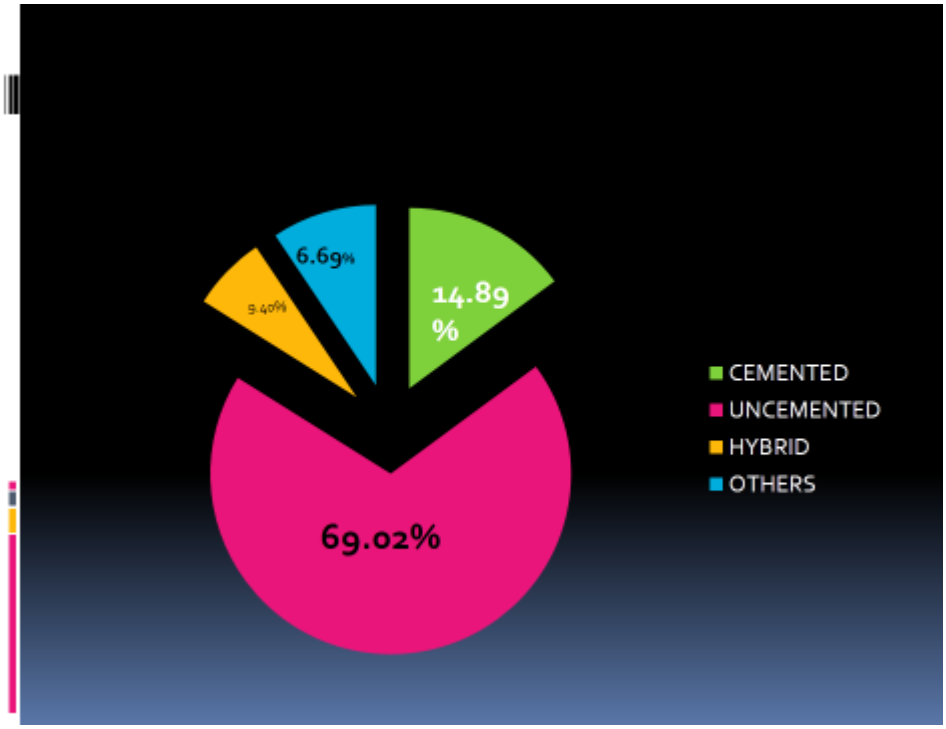
Gender Distribution THA



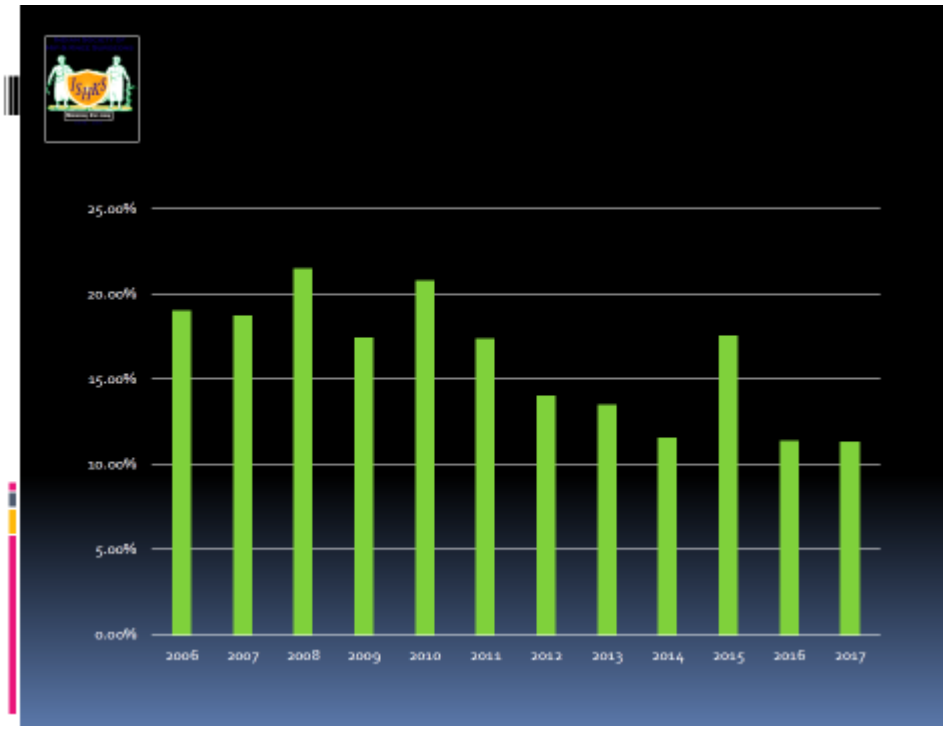
Age Distribution: Male vs Female (THA)



Diagnosis THA



Implant Type



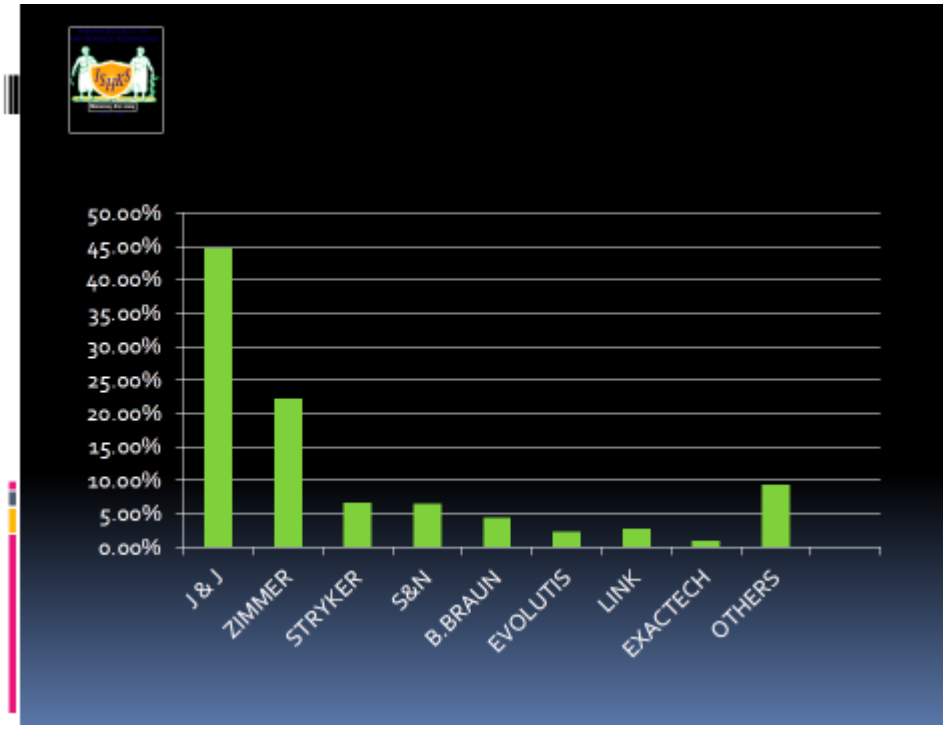
Cemented THA Year Wise

Year	Total THR	Head Size (22 mm) %	Head Size (28 mm) %	Head Size (32 mm) %	Head Size (36 mm) %	Head Size (>36 mm) %
2013	1272	1.25	42.84	17.76	32.54	2.98
2014	1662	0.54	44.22	18.59	32.06	2.16
2015	1888	0.90	37.34	20.18	36.06	2.91
2016	2157	1.94	32.03	23.78	35.79	3.84
2017	2080	2.64	29.42	22.06	38.41	4.23

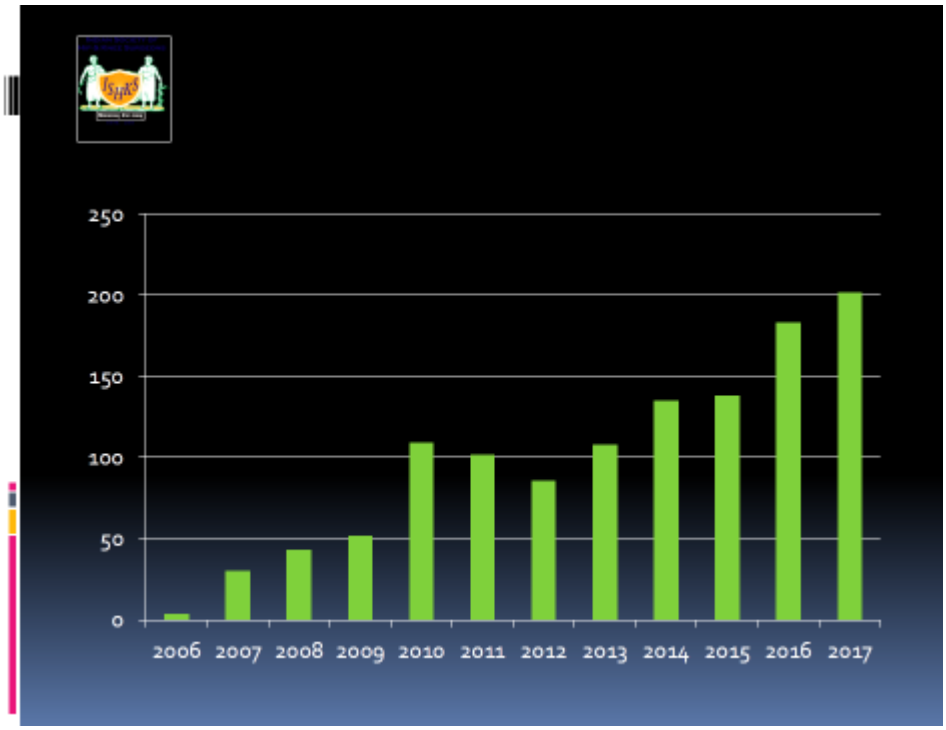
Head Size THA

Year	Ceramic/ Ceramicised (%)
2013	36.10 (%)
2014	43.56 (%)
2015	50.42 (%)
2016	57.85 (%)
2017	55.72 (%)

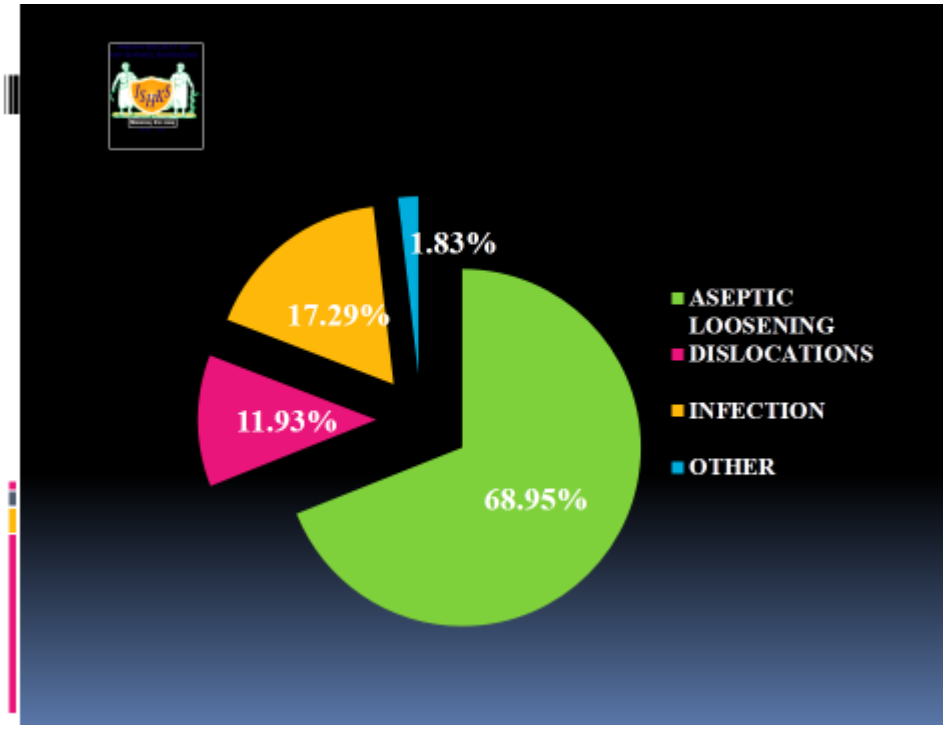
THA Ceramic/Ceramicised



Market penetration THA



Revision THA



Revision THA: Cause