

HCV Treatment Regimens and Pre-Treatment Patient Education

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HCV PharmD Patient Workflow

- Introduction, role in clinic/reason for Pharm visit
- Review current medication list – in-depth comprehensive medication assessment
 - Appropriateness
 - Efficacy
 - Safety
 - Tolerability
 - Affordability
 - Adherence
- Educate on HCV therapy
 - Directions
 - Importance of adherence
 - Address drug interactions
 - Potential side effects
 - Cost

Adherence Review

- What are they taking medication for
- How are they taking medication
- When are they taking medication
- How they manage medications at home
 - Self-managing? Does someone help them?
- How do they remember to take medications daily
 - What tools do they use – pillbox, phone alarms






Factors Affecting Nonadherence

Table 1. Five Key Factors That Affect Medication Nonadherence

Factor	Examples
Socioeconomic factors	Poverty, illiteracy, unemployment, lack of social support networks, unstable living conditions, greater distance from treatment centers, higher out-of-pocket cost of medications and care, lack of transportation, cultural beliefs reflecting mistrust in the health care system, family dysfunction, patient demographic characteristics, levels of education, and literacy.
Health care system factors	Lack of patient engagement skills of health care professionals, little focus on team-based care, and lack of adherence monitoring.
Medical condition factors	Multiple health conditions, depression, and the simultaneous use of multiple drugs to treat a single ailment or condition (polypharmacy).
Therapy-related factors	Side effects, complexity of the medical regimen, long duration of regimen, and frequent changes to regime.
Patient-related factors	Visual, hearing, cognitive, mobility, and swallowing impairments; difficulty filling prescriptions (due to few resources or literacy); lack of knowledge or understanding about the disease or need for the prescribed medication; expectations about and perceived benefits of treatment; ability and motivation to follow a medical regimen; frustration; anxiety; and substance or alcohol abuse.

Adherence Strategies

- Patient education
- Involvement in treatment decision when possible
 - Ask what time they prefer to take medication
- Use of adherence tools
 - Pillbox
 - Phone alarms
 - Schedule medications around daily activities
 - Storage of medications in places commonly frequented
- Screen for poor health literacy
 - Create shame-free environment
 - Provide pictorial and audio-visual educational material instead of written instruction
- Screen for mental illness/physical disabilities
 - Recognize and treat mental illness
 - Visually impaired – use of textured stickers/rubber bands on medication bottles, medication pillbox setup
- Assess economic status

When do I take this drug?	Drug Name
Morning 	
Noon 	
Evening 	
Bedtime 	
Only when I need it 	

Factors to Consider for Providers

- Effective communication
 - Consider patients' cultural beliefs and attitudes
- Create blame free environment
- Prescribing decisions
 - Simplify regimen as much as possible
 - Provide all important information for new medications
 - Use teach-back method
- Review medication list or pertinent medications at every visit
 - Assess adherence at every visit

HCV Medications

Mavyret (Glecaprevir/Pibrentasvir)

- 3 tablets once daily with food
- Cannot place in pillbox
- Packaging small enough to carry with



Epclusa (Sofosbuvir/Velpatasvir)

- 1 tablet once daily with or without food



HCV Medications Cont.

Harvoni (Sofosbuvir/Ledipasvir)

- 1 tablet once daily with or without food



Vosevi (Sofosbuvir/Velpatasvir/Voxilaprevir)

- 1 tablet once daily with food



HCV genotype(s)	Therapeutic drug(s)	Duration of treatment (weeks)	Treated subjects	With or without cirrhosis
HCV genotype 1	Elbasvir/Grazoprevir 1b	12	Naive	without cirrhosis
	Glecaprevir/Pibrentasvir 1a	8-12	HIV negative Sofosbuvir failure	Without cirrhosis
	Ledipasvir/sofosbuvir	12-24	DAA's failure (particularly NS5A inhibitor)	Without cirrhosis
	Sofosbuvir/Velpatasvir	12-24	DAA's failure	Without cirrhosis
	Sofosbuvir/velpatasvir/voxilaprevir	12	NS5A failure	Without cirrhosis
HCV genotype 2	Daclatasvir plus Sofosbuvir	12	Post-liver transplant	Without cirrhosis
	Glecaprevir/Pibrentasvir	8-12	Transplantation	Without cirrhosis
	Sofosbuvir/velpatasvir	12-24	DAA's failure, transplantation	Without cirrhosis
	Sofosbuvir/Velpatasvir/Voxilaprevir	12	NS5A failure	With cirrhosis
HCV genotype 3	Daclatasvir plus Sofosbuvir	12	Naive	Without cirrhosis
	Glecaprevir/Pibrentasvir	8-12	Naive	With cirrhosis
	Sofosbuvir plus Elbasvir/Grazoprevir	12	Naive	Compensated cirrhosis
	Sofosbuvir/velpatasvir	12	Naive	Without cirrhosis
	Sofosbuvir/velpatasvir/voxilaprevir	12	DAA's failure	Without cirrhosis
HCV genotype 4	Daclatasvir plus sofosbuvir	12	HIV/HCV coinfection	Decompensated cirrhosis
	Elbasvir/Grazoprevir	12	Naive	Without cirrhosis
	Glecaprevir/Pibrentasvir	8-12	Naive, peg-IFN plus ribavirin	With cirrhosis
	Ledipasvir/Sofosbuvir	12-24	Naive, Sofosbuvir failure	Without cirrhosis
	Sofosbuvir/Velpatasvir	12-24	NS3 protease inhibitor failure	Without cirrhosis
HCV genotypes 5 and 6	Glecaprevir/Pibrentasvir	8-12	Naive, peg-IFN plus ribavirin	With cirrhosis
	Ledipasvir/Sofosbuvir	12-24	Naive, transplantation, Sofosbuvir failure	Without cirrhosis
	Sofosbuvir/Velpatasvir	12-24	Naive, DAA's failure	Without cirrhosis
	Sofosbuvir/Velpatasvir/Voxilaprevir	12	NS5A failure	Without cirrhosis
Regardless genotype	Daclatasvir plus sofosbuvir	12	HCV/HIV coinfection	With cirrhosis
Mixed genotypes	Glecaprevir/pibrentasvir or sofosbuvir/velpatasvir			

Thank you!
Questions?